

Brandt

FERGUSON

NORDMENDE

SABA

TELEFUNKEN

THOMSON

PARTS LIST

LISTE PIECES DETACHEES

ERSATZTEILLISTE

LISTA PARTI DI RICAMBIO

LISTA DE PIEZAS DE REPUESTO

Chassis ICC17

MODULES

MAIN IC17F6CP015030



GK01	TFMK1330T	10132410
IB01	TDA6107Q	10533940
IF01	TDA8351	20753830
IP20	TS3702CD FLAT	10537330
IP61	TL431ACZ	10538830
IP87	MC7812/CT	46007600
IP95	TDA8139	10044580
IR01	ST92R195 CUT2.1 FLAT	10588180
IR02	MX27C4000MC-12	10585660
IR03	M24C08MN FLAT	10564350
IS40	MSP3400C-PP-C6	10379290
IS80	TDA7269	10348790
IV01	TDA8855H FLAT	10533960
IX01	BA7604N	10539590
ZL11	MP40	△ 10469170
ZL13	MP63	△ 10472270
ZL14	MP50	△ 10457120



IP50	TLP621 GR(D4-LF2 T)	△ 20827900
TB01,TP21	BF423	16003110
TB02,TL02	BF422	16003090
TF01,TI60,	BC847B SMD	11070770
TL31,TP58,59,		
67,71,76,90,		
TR60,TS01,81,		
TV10		
TI10	DTC144EK SMD	16007030
TL14	2SC2236Y	16000220
TL32	BC337-40	45001466
TL33	MPS750	16001340
TL34,TP50	BUH516TH16	10401110
TL41	BD241C	16001880
TL42	BC546B	45001866
TL59,TP42,86,	BC857B SMD	30946660
TR15		
TL71	BC847C SMD	90618810
TL72	RN1401 SMD	10966100
TP14,TX15,45	BC547B	16000890

TP15	BTB06-600C	10259910
TP44	2SA1020Y	16003740
TP57,75,82	BCR191 SMD	16006910
TP72,TR20	DTC113ZK SMD	10550750
TR13,23,40	BCR141 SMD	16006890

DB04	1N4004	44009009
DB30,31,50,51, 70,71,DL31	BAV21	44044407
DE01	BZX55C2V7	80444120
DF01	BZW04-48	10351880
DH01	BZX55B33	80442730
DH04,DL12,32, 33,72,74,75,	1N4148	44009209
DP53,DR20,23,		
DV19		
DK01,DL09,	BZX55C5V1/ZPD5V1	80444140
DP72		
DL11	RGP10M	10455320
DL13	RGP30D	10455370
DL14	RGP15G	10272800
DL19,73,77,	LL4148 SMD	16012450
DP24,40,42,52, 54,56,57,58, 60,61,62,63, 67,70,85,89, DR21,22,24,		
DV09		
DL21	BY228	10406470
DL22,DP80	BYW76	16009120
DL24,25,DP12, 41,46,47,48	RGP10G	10459090
DL42	ZMM5,1 SMD	70446740
DL48,DX59,62	BAV103 SMD	10155030
DL71	BZX55C30	80444170
DP01,02,03,04	BYW27-1000	10455390
DP14	BZX55C3V3	30948790
DP16,17,18,19	1N4001	16008160
DP20	ZPD51/BZX55C51/BZX79C51	90578110
DP21	BZX85C39	80444000
DP22	BZX55C5V6/ZPD5V6	44025401
DP43,45,50,87	RGP02-20	10472330
DP44	BZX55C3V9	80444130
DP59	BZX55C18	11073680
DP82	FUF4005	16009580
DP83,DR10	BAT42	16007410

DP84,93	MUR120	10564670
DP94	BZX55C13	70438310
DR05	LL42 SMD	16012530
DS90	BZX55C3V6	50890640
GE01	TLUV5300 LED	11137650

FI10	OFWG3970M FOS	10512420
FI20	OFWK9354M FOS	10354110
FI50	5M74HZ	20338170
QC01	4M433619HZ	10542210
QC02	3M579545HZ	10542190
QS40	18M432HZ	10334670

FI01	40M4HZ	20300950
FI02	31M9HZ	10552630
FI30	77M8HZ	10559760

PP64	1K0 OHM	70434550
RB01,04	1K5 OHM 5%,0,50W	10121880
RB31,51,71	560R0 OHM 10%,0,50W	10257590
RC02,RV01	1R0 OHM 5%,0,40W	△ 35031200
RF05	1R0 OHM 1%,0,70W	10254220
RF07	220R0 OHM 1%,0,70W	10233720
RF08	33R0 OHM 10%,0,25W	△ 13062810
RL01	45K3 OHM 1%,0,25W	15018160
RL07	6K19 OHM 1%,0,40W	15020490
RL10	47R0 OHM 5%,0,50W	10233220
RL13,RP49	0R47 OHM 5%,2,5W	10537750
RL35	4R7 OHM 5%,0,50W	△ 15010040
RL36,RP10	2R2 OHM 5%,0,25W	△ 15009870
RL43	68K1 OHM 1%,0,70W	10147740
RL44	2R2 OHM 5%,0,50W	△ 10440420
RP04	2R7 OHM 5%,4,50W	10379110
RP15	18R0 OHM 220V PTC	△ 41398800
RP50	10M0 OHM 5%,0,70W	△ 10074320

R : RECYCLED PART

: PIECE RECYCLEE

: AUSTAUSCHTEILE

: RICAMBIO RICICLATO

: MODULO REPROCESADO

For any requests, please contact THOMSON multimedia after sales service area

Pour toutes précisions, contactez votre service après vente local THOMSON multimedia

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35065280

REV. N° 0 00 / 00 00000000

1/2

RP63	432K0 OHM 1% 0,25W	15017950	BQ12	JACK SOCKET PRISE JACK BUCHSE PRESA JACK TOMA JACK	10539510	ON/OFF BUTTON TOUCHE MARCHE/ARRET EIN-AUS TASTE TASTO ACCESSO/SPENTO TECLA MARCHA/PARADA	25313050
RS12	18R0 OHM 5% 0,30W	▲ 15009660					
RS20,87,88	4R7 OHM 5% 0,25W	▲ 35032200					
RV20	33K2 OHM 1% 0,25W	15016530					
RX17	10R0 OHM 5% 0,25W	▲ 15009580	BX01,02	SCART SOCKET PRISE PERITEL EURO-AV-BUCHSE EUROPRESA NORMALIZZATA EUROCONECTOR	90617260	BUTTON STRIP BARRETTE DE TOUCHES TASTENLEISTE PIATTINA TASTI PLACA DE TECLAS	25330350
			CO115	ON/OFF SWITCH CONTACTEUR MARCHE/ARRET EIN-AUS SCHALTER CONTATTORE ACCESO/SPENTO CONTACTOR MARCHA/PARADA	▲ 10276500	CHASSIS SUPPORT SUPPORT CHASSIS CHASSIS HALTER SUPPORTO CHASSIS SOPORTE CHASSIS	25297670
CB01	10NOF 3KOV	14036450	FP01	2A5T TIME-LAG FUSE 2A5T FUSIBLE TEMPORISE 2A5T SICHERUNG 2A5T FUSIBLE TEMPORIZZATO 2A5T FUSIBLE TEMPORIZADO	▲ 10246750	A59EHJ43X15 CATHODE RAY TUBE A59EHJ43X15 TUBE CATHODIQUE A59EHJ43X15 FARBBILDROEHRE A59EHJ43X15 TUBO CATODICO A59EHJ43X15 T.R.C	▲ 10555690
CL08	10NOF 5% 400V	14035870	NH01	CTT5010 UHF/VHF TUNER CTT5010 TETE UHF/VHF CTT5010 UHF/VHF TUNER CTT5010 TUNER UHF/VHF CTT5010 SINTONIZADOR	R 20812280	DEGAUSSING COIL BOBINE DE DEMAGNETISATION ENTMAGNETISIERUNGSPULE BOBINA DI SMAGNETIZZAZIONE BOBINA DE DESIMANTACION	▲ 47320092
CL12,15,CP42, 85,94	330P0F 20% 1KOV	14035270	SK01,02,03,04	MICROSWITCH MICRO CONTACTEUR MIKRO SCHALTER MICROINTERRUTTORE MICROCONTACTOR	30011100	RCT100 REMOTE CONTROL RCT100 TELECOMMANDE RCT100 FERNBEDIENUNG RCT100 TELECOMANDO RCT100 TELEMANDO	10546340
CL21	14NOF 3,5% 1K6V	43461200				FOLDING BOX EMBALLAGE CARTON KARTON IMBALLAGGIO CARTONE EMBALAJE CARTON	25302970
CL22	30NOF 5% 400V	10242070				FITTING UPPER CALE SUPERIEURE POLSTER OBEN DISTANZIATORE SUPERIORE CALZO SUPERIOR	25303020
CL24	440NOF 5% 250V	43352100				FITTING DOWNER CALE INFERIEURE POLSTER UNTEN DISTANZIATORE INFERIORE CALZO INFERIOR	25303050
CL42	2U7F 10% 100V	10161170					
CP01	100NOF 20% 275V	▲ 10331520					
CP03,04	4N7F 1KOV	10058740					
CP05	1N5F 10% 1K0V	20338740					
CP10	150UOF 385V	43424800					
CP11	10NOF 10% 400V	15001080					
CP16,17	220NOF 20% 275V	▲ 30745000					
CP20	220P0F 10% 400V	14033000					
CP49	1NOF 10% 1K6V	10539060					
CP50	1NOF 20% 400V	▲ 43106800					
CP51	150P0F 20% 400V	▲ 20298500					
CP83	100P0F 20% 1K0V	14035280					
							
EQUIPMENT/PRESENTATION EQUIPEMENT/PRESENTATION AUSSTATTUNG/GEHAEUSE PARTI VARIE EQUIPO/PRESENTACION							
LL05	DSTM30FBC3	▲ 10546610					
LL26		▲ 10526140					
LL32	DRIVER	10518110	FRONT PANEL		25363380		
LP01		▲ 10261530	FACADE				
LP20	DRIVER	▲ 10554410	FRONTPLATTE				
LP44	DRIVER	10561800	PANNELLO FRONTALE				
LP50	SMT41	▲ 10537860	PANEL FRONTAL				
OTHER PARTS AUTRES PIECES SONSTIGE TEILE ALTRE PARTI OTRAS PIEZAS							
BB05	CATHODE RAY TUBE SOCKET	▲ 80298800	LOGO THOMSON		25287740		
	SUPPORT TUBE CATHODIQUE		LOGO THOMSON				
	BILDROEHRENFASSUNG		SCHRIFTZUG THOMSON				
	SUPPORTO TUBO CATODICO		MARCHIO THOMSON				
	SOPORTE T.R.C		LOGOTIPO THOMSON				
BJ10	CINCH SOCKET	10037440	LOUDSPEAKER GUIDE		25301600		
	PRISE CINCH		CORNET ACoustIQUE				
	CINCH-BUCHSE		FUEHRUNGSSCHIENE LAUTSPRECHER				
	PRESA CINCH		GUIDA ALTOPARLANTE				
	TOMA CINCH		GUIA ALTAZOZO				
BJ11	SVHS SOCKET	20392900	8R OHM 15W LOUDSPEAKER		10467060		
	PRISE SVHS		8R OHM 15W HAUT PARLEUR				
	S-VHS-BUCHSE		8R OHM 15W LAUTSPRECHER				
	PRESA SVHS		8R OHM 15W ALTOPARLANTE				
	TOMA SVHS		8R OHM 15W ALTAZOZO				
INSTRUCTIONS NOTICES ANLEITUNGEN ISTRUZIONI MANUALE							
						25DG21C PARTS LIST	35065280
						25DG21C LISTE DE PIECES DETACHEES	
						25DG21C ERSATZTEILLISTE	
						25DG21C LISTA PARTI DI RICAMBIO	
						25DG21C LISTA DE PIEZAS DE REPUESTO	
						ICC17 SERVICE MANUEL EUROPE	35063330
						ICC17 DOC TECHNIQUE EUROPE	
						ICC17 TECHNISCHE DOKUMENTATION EUROPE	
						ICC17 DOCUMENTAZIONE TECNICA EUROPE	
						ICC17 DOCUMENTACION TECNICA EUROPE	
						25DG21C UM THOMSON D/I/GB/GR/F	25340560
						25DG21C NU THOMSON D/I/GB/GR/F	
						25DG21C BA THOMSON D/I/GB/GR/F	
						25DG21C IU THOMSON D/I/GB/GR/F	
						25DG21C IU THOMSON D/I/GB/GR/F	

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WARNING : *Before servicing this chassis read the safety recommendations.*

ATTENTION : *Avant toute intervention sur ce châssis, lire les recommandations de sécurité.*

ACHTUNG : *Vor jedem Eingriff auf diesem Chassis, die Sicherheitsvorschriften lesen.*

ATTENZIONE : *Prima di intervenire sullo chassis, leggere le norme di sicurezza.*

IMPORTANTE : *Antes de cualquier intervención, leer las recomendaciones de seguridad.*

Do not disconnect modules when they are energized! Repairs on power supply section are to be carried out only with isolating transformer.

Ne pas retirer les modules lorsqu'ils sont sous tension. N'effectuer les travaux de maintenance sur la partie reliée au secteur (Switch Mode) qu'au travers d'un transformateur d'isolation. Module nicht bei eingeschaltetem Gerät entfernen ! Servicearbeiten am Netzteil nur unter Verwendung eines Regeltransformators durchführen.

Non scollegare i moduli quando sono alimentati! Intraprendere riparazioni sulla sezione alimentatore solo con trasformatore isolante.

No desconectar los módulos cuando están activados. Las reparaciones en la sección de alimentación de energía deben ser ejecutadas solamente con un transformador de separación.

⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil. Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) nicht durch Original - Ersatzteile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (marcati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio. In tal caso è "esclusa la responsabilità" del costruttore.

La sustitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados segun la norma CEI 65, provoca la no conformidad del aparato. En ese caso, el fabricante cesa de ser responsable.

Note : During measurements in the power supply unit, use the primary power unit ground (Emit. TP060).

Attention : Mesures dans le bloc alimentation. Utiliser la masse du bloc alimentation (Emet. TP060).

Achtung : Bei Messungen im Primärnetzteil. Primärnetzteilmasse verwenden (Emit. TP060).

Attentionze : Misure nell'alimentatore primario. Usare massa alimentazione primario (Emet. TP060).

Cuidado : Medida en el bloque de alimentación. Utilizar la masa del bloque de alimentación (Emet. TP060).

MEASUREMENT CONDITIONS - CONDITIONS DE MESURES - MESSBEDINGUNGEN CONDIZIONI DI MISURA - CONDICIONES DE MEDIDAS

RECEIVER :

Bar test pattern : PAL, I standard, 100% white.

- On UHF, input level 1 mV
- Via the scart socket, input level 1 Vpp

Colour, contrast and brightness at mid-position, sound at minimum.

Programme selected : PR 01.

DC voltages measured between the point and earth using a digital voltmeter.

RECEPTEUR :

Mire de barres : SECAM, Norm L, Blanc 100%.

- En UHF, niveau d'entrée 1 mV
- Par la prise Péritélévision, niveau d'entrée 1Vcc.

Couleur, contraste, lumière à mi-course, son minimum.

Programme affecté PR 01.

Tensions continues relevées par rapport à la masse avec un voltmètre numérique.

EMPFÄNGER :

Farbbalken : PAL, Norm G, Weiss 100%

- Bei UHF Eingangsspeigel 1 mV.
- Über die Scartbuchse : Eingangsspeigel 1 Vss.

Farbe, Kontrast, Helligkeit in der Mitte des Bereichs, Ton auf Minimum.

Zugeordnetes Programm PR 01.

Gleichspannungen mit einem digitalen Voltmeter zur Masse gemessen.

RICEVITORE :

Monoscopio per barre : PAL, norma G. bianco 100%.

- In UHF, livello d'entrata 1 mV,
- Per la presa SCART, livello d'entrata 1 Vcc.

Colore, Contrasto, Luce a metà corsa, Suono minimo.

Programma designato PR 01.

Tensioni continue rilevate rispetto alla massa con un voltmetro numerico.

RECEPTOR :

Mira de barras : PAL, norma G, blanco 100%.

- En UHF, nivel de entrada 1 mV,
- Por la toma Peritelevision, nivel de entrada 1 Vpp.

Color, Contraste, luz a mitad de carrera, Sonido minimo.

Programa afectado PR 01.

Tensiones continuas marcadas en relacion a la masa con un voltmetro digital.

VOLTAGGI DC SECONDARI

Tutte le misurazioni in questo capitolo dovrebbero essere fatte SENZA i voltaggi principali.

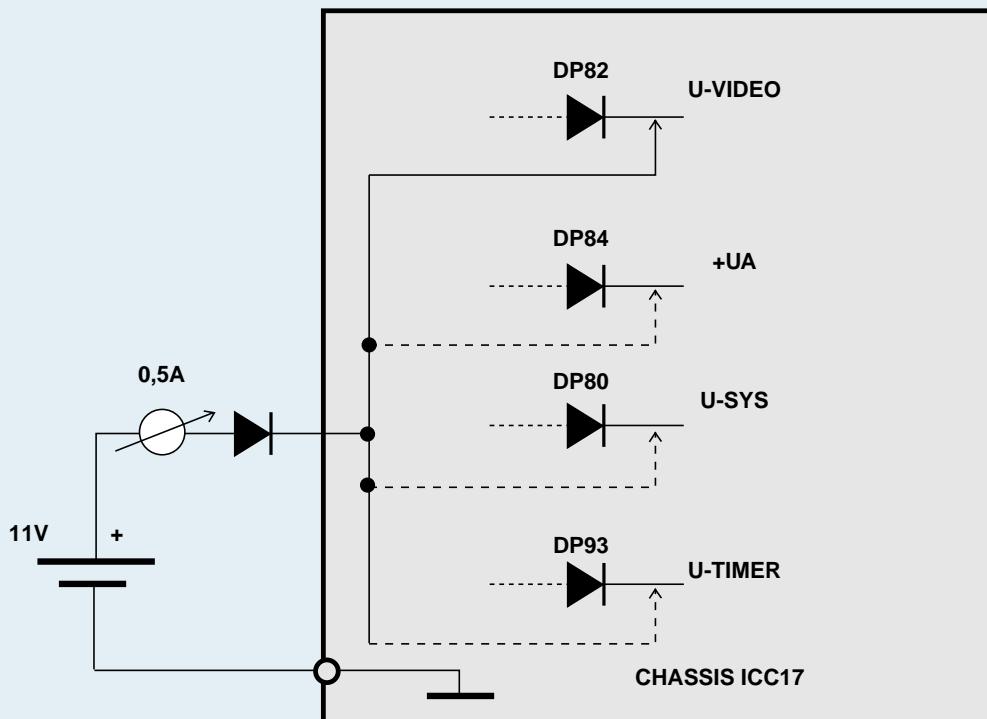
Test del circuito:

il voltaggio esterno è una fornitura d'energia esterna DC con un voltaggio regolato di 11V e una limitazione di corrente a 0,5A.

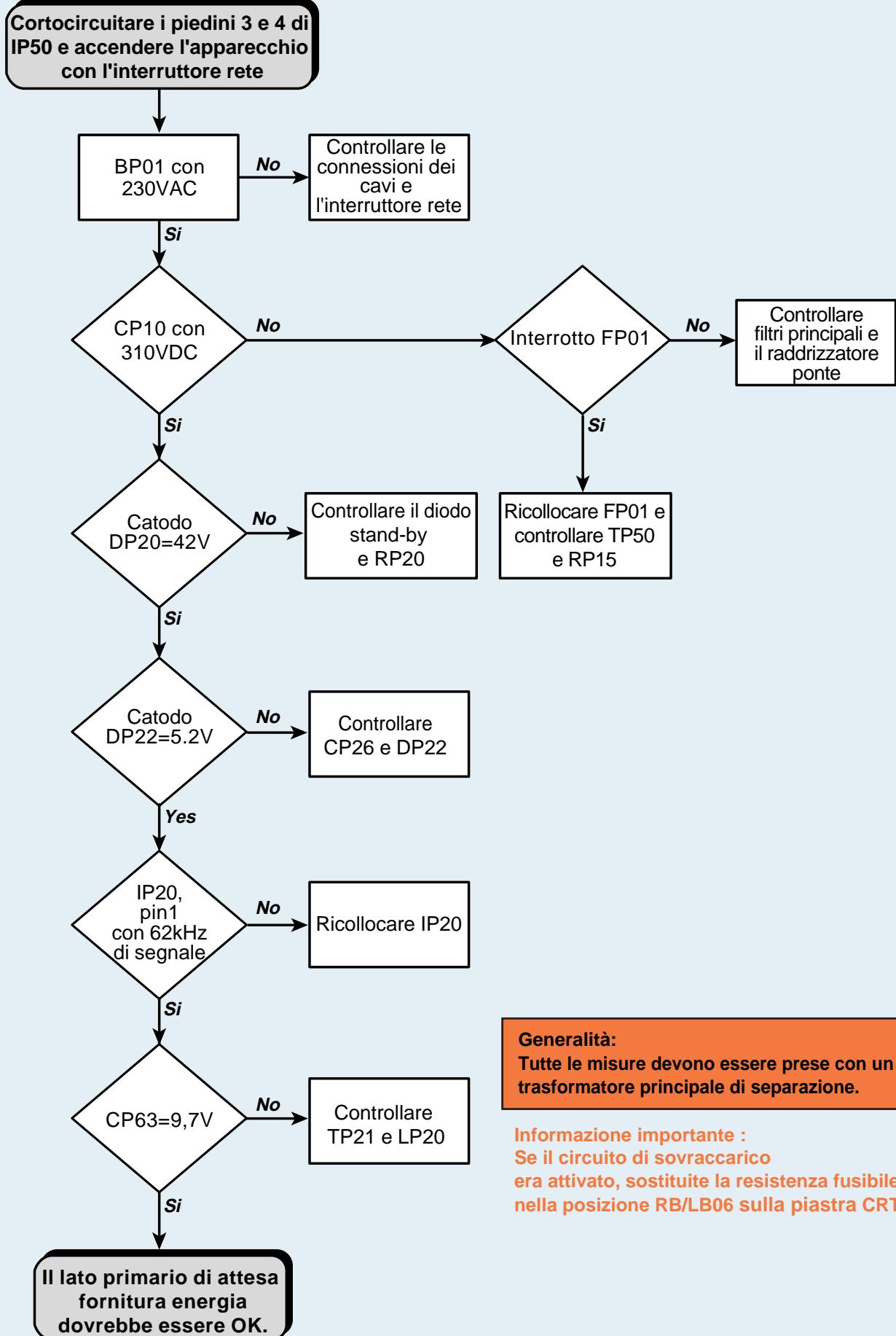
Il polo della fornitura del voltaggio esterno deve essere direttamente connesso al campo secondario del telaio.

Il polo + della fornitura del voltaggio esterno fornisce il carico tramite un diodo.

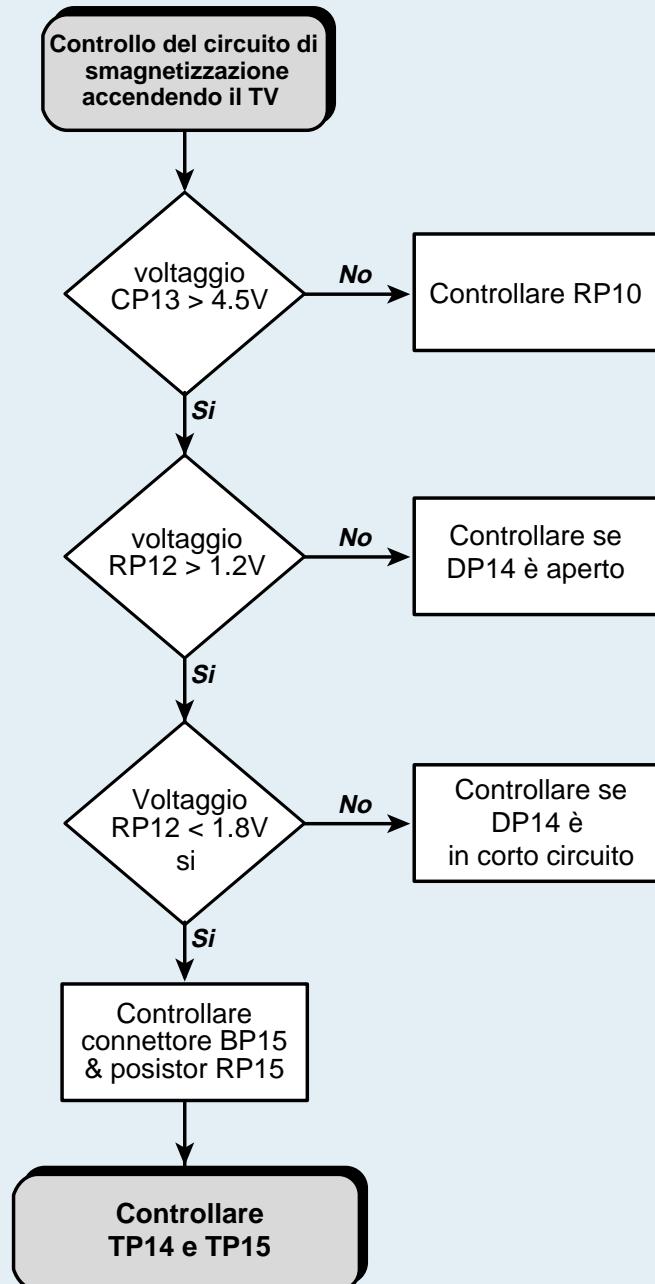
L'anodo di questo diodo è connesso al polo +, il catodo è connesso al carico sul telaio. La corrente deve essere misurata.



ALIMENTAZIONE STAND-BY – LATO PRIMARIO



CIRCUITO DI SMAGNETIZZAZIONE



VOLTAJES DC SECUNDARIOS

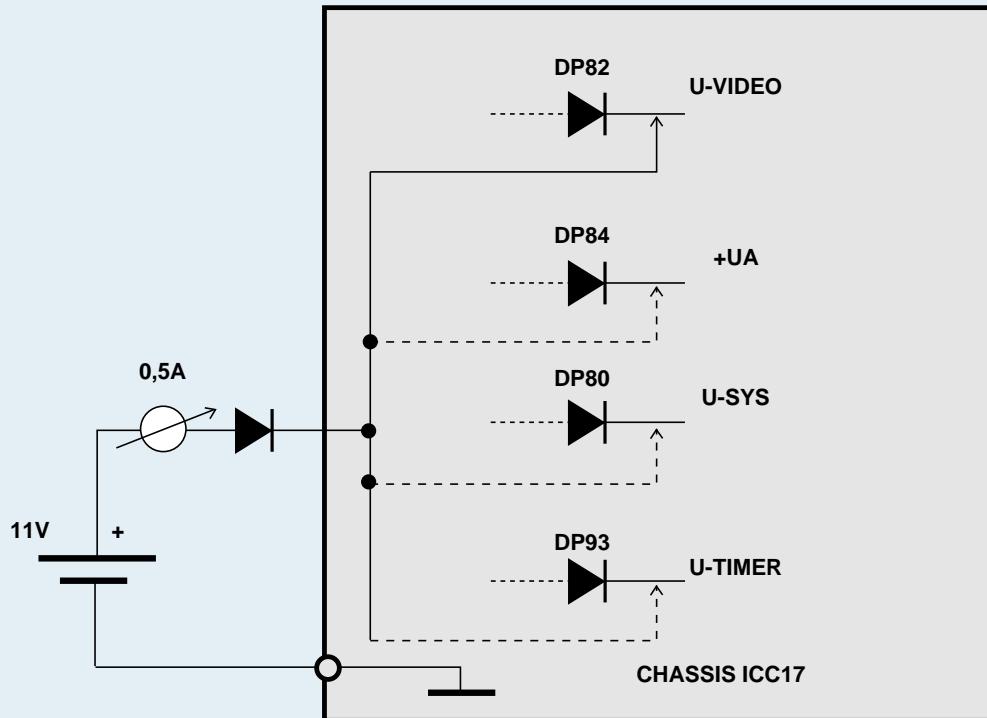
Todas las mediciones en este capítulo deberán hacerse SIN tensión de sector.

Test circuito:

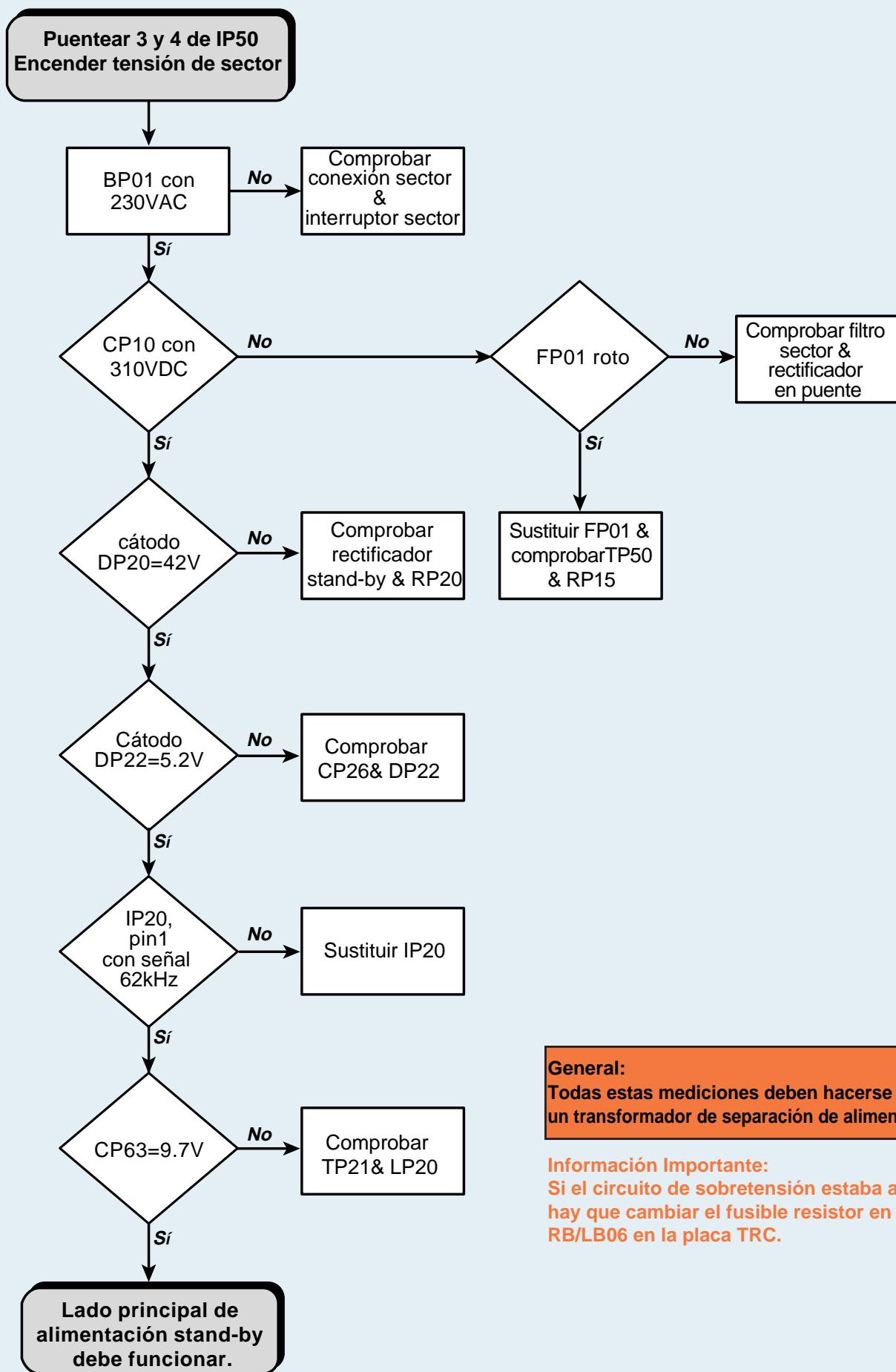
El voltaje externo es una alimentación DC externa con un voltaje ajustado de 11V y una limitación de corriente de 0.5A. El polo de la alimentación del voltaje externo debe estar directamente conectado a toma de tierra secundaria del chasis.

El polo+ de la alimentación del voltaje externo alimenta la carga a través de un diodo.

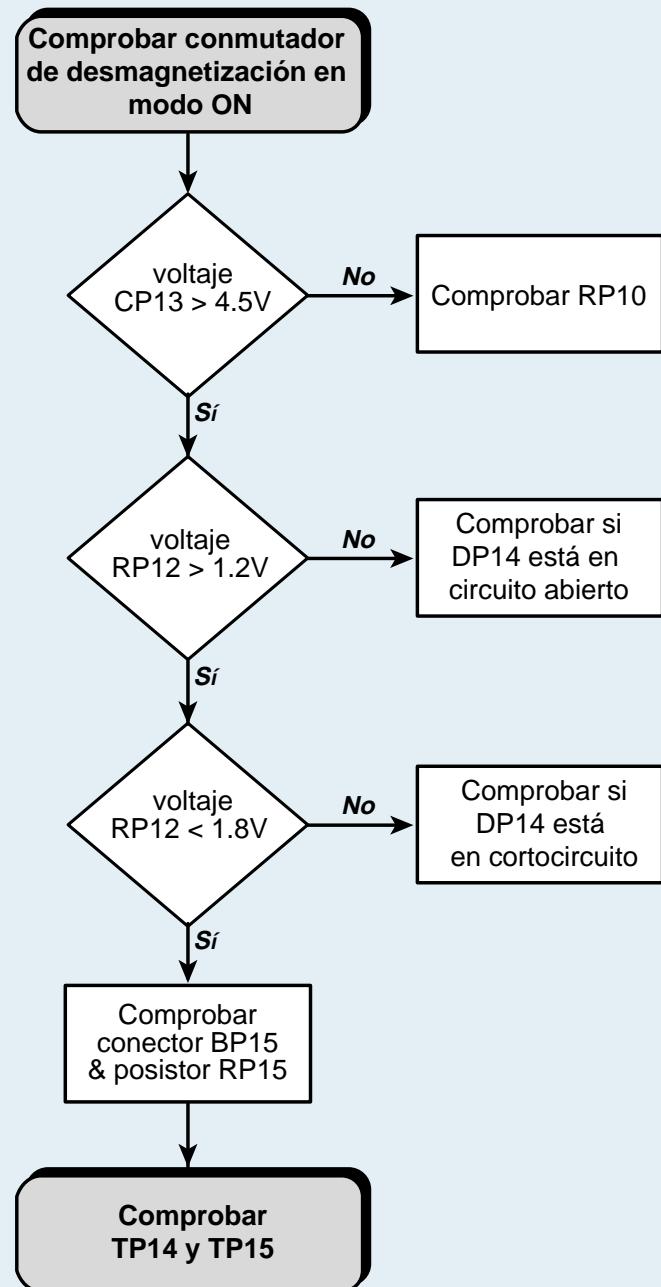
El ánodo del diodo está conectado al polo+, el cátodo de este diodo está conectado a la carga en el chasis. La corriente debe ser medida.



ALIMENTACION STAND BY – LADO PRINCIPAL



CIRCUITO DE DESMAGNETIZACION

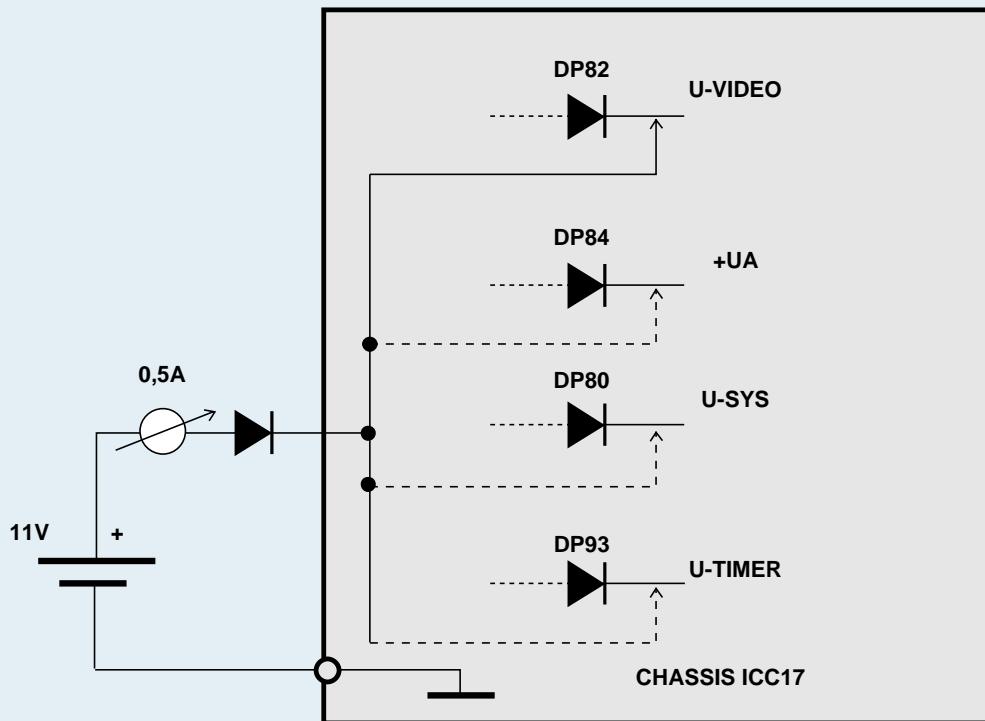


SECONDARY DC-VOLTAGES

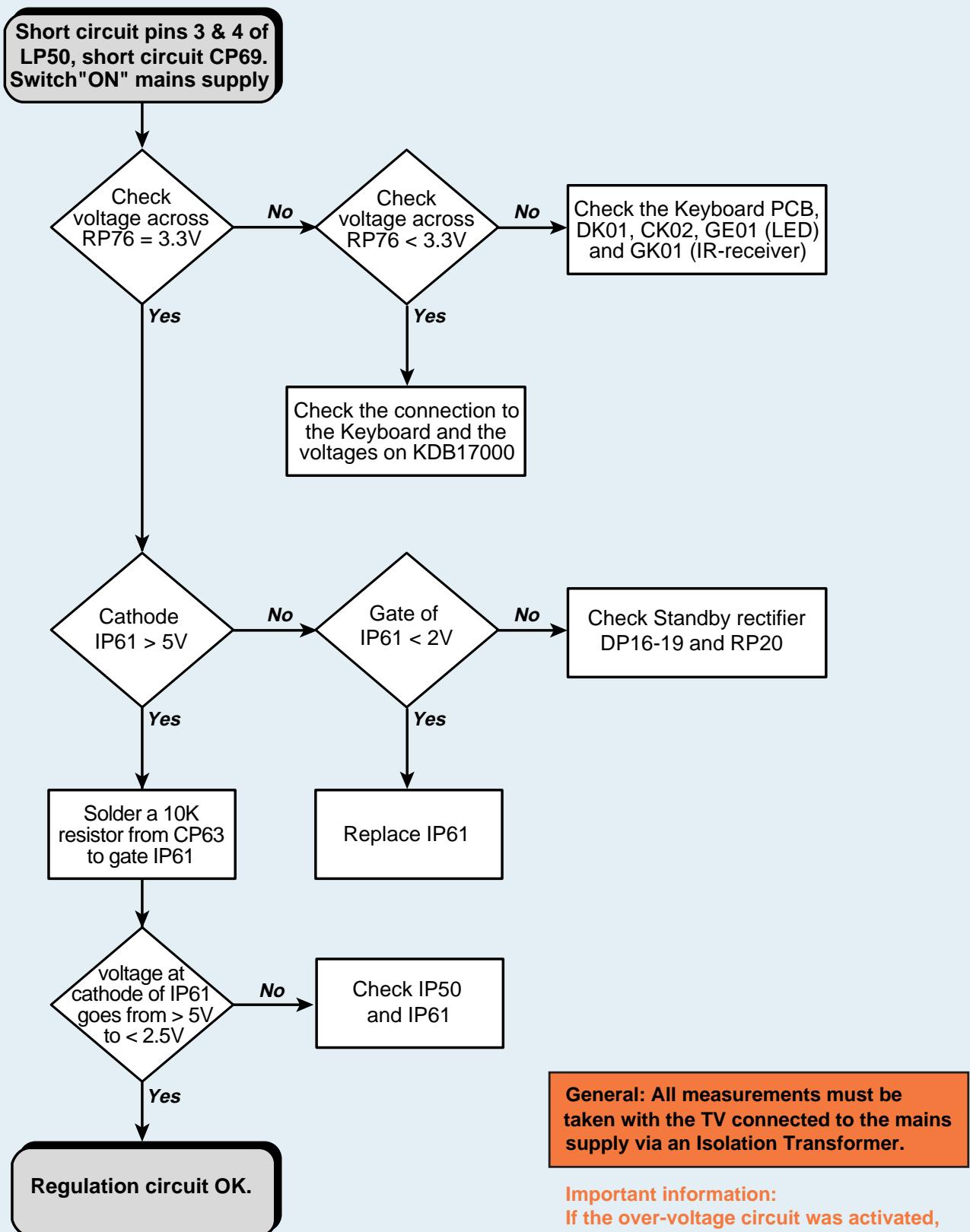
All measurements in this chapter must be done WITHOUT the mains supply connected to the TV.

Test circuit:

The external voltage source is provided by a variable DC-power supply with its output voltage set to 11V and the current limitation set to 500mA's. The negative terminal of the DC-power supply must be directly connected to the chassis secondary ground plane. The positive terminal of the DC-power supply is first connected to an ammeter and then the anode of an isolation diode. The cathode of the isolation diode is then connected to the load on the chassis as shown below. Measure the current drawn by each load tested.



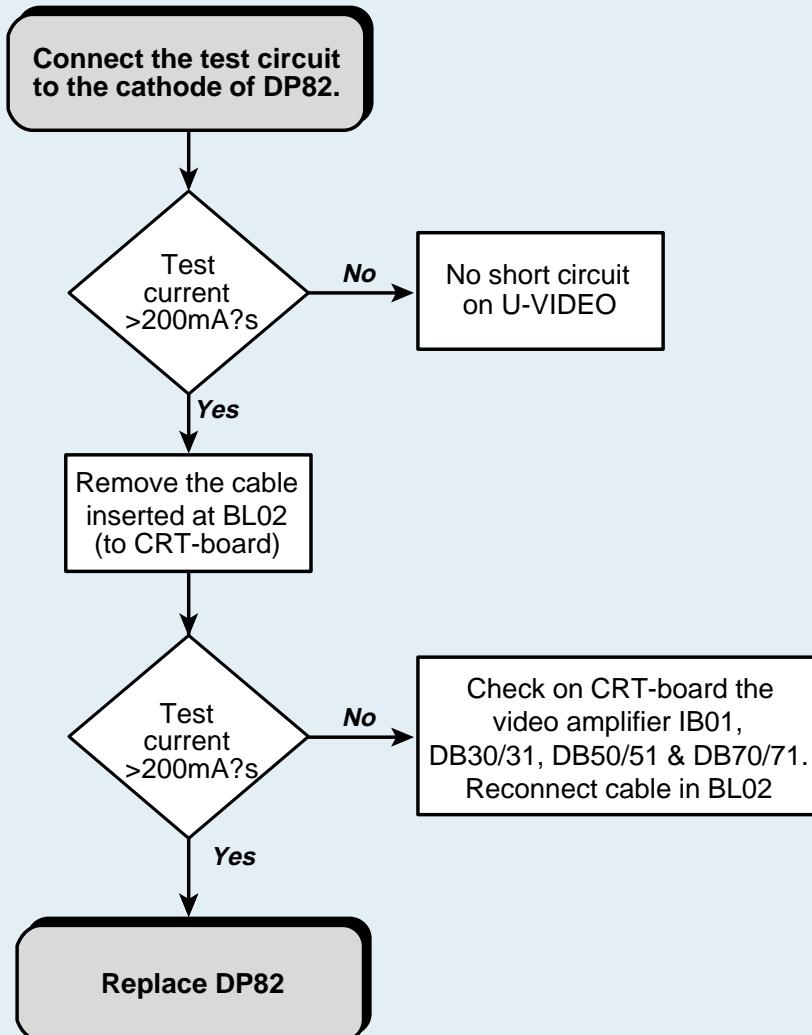
STANDBY POWER SUPPLY - SECONDARY SIDE



After finishing this test, please remove the short circuits from pins 3/4 of LP50 and CP69 also remove the 10k resistor.

Important information:
If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

POWER SUPPLY - SECONDARY SIDE : U-VIDEO

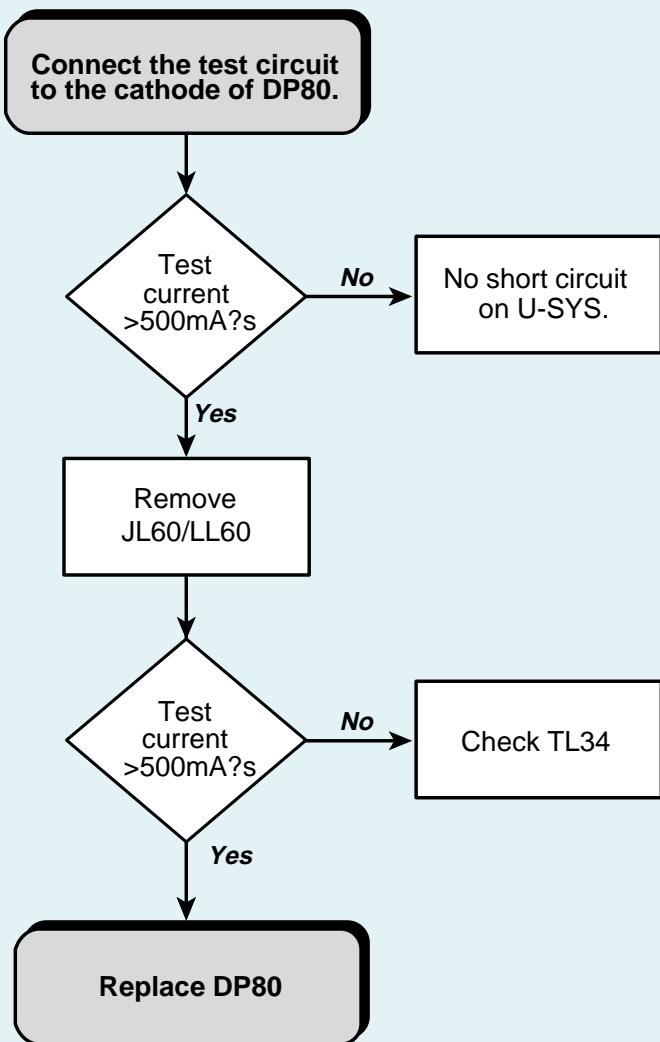


After finishing this test, please replace cable BL02 and remove the test circuit.

General: All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.

Important information:
If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

POWER SUPPLY - SECONDARY SIDE : U-SYS

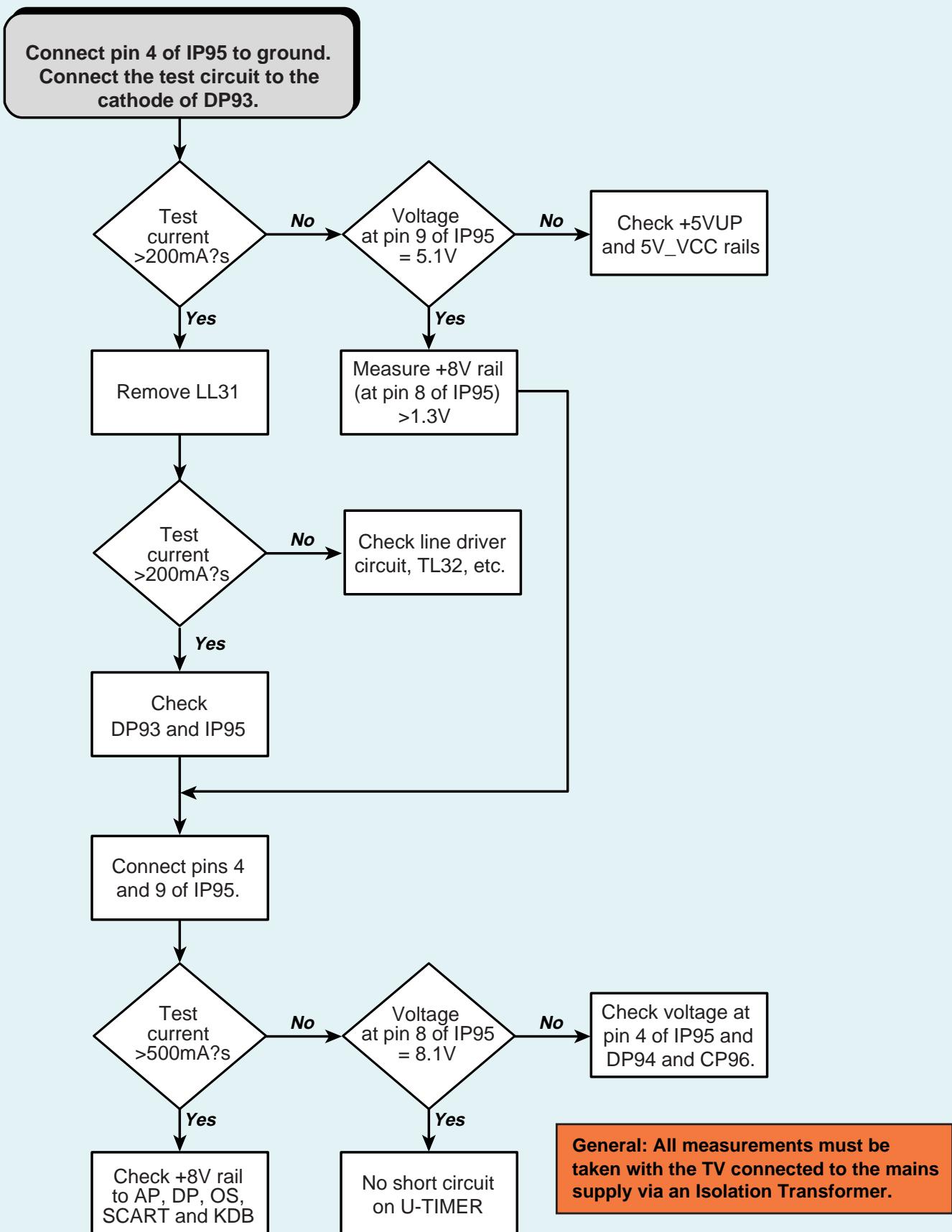


After finishing this test, please replace JL60/LL60 and remove the test circuit.

General: All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.

Important information:
If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

POWER SUPPLY - SECONDARY SIDE : U-TIMER

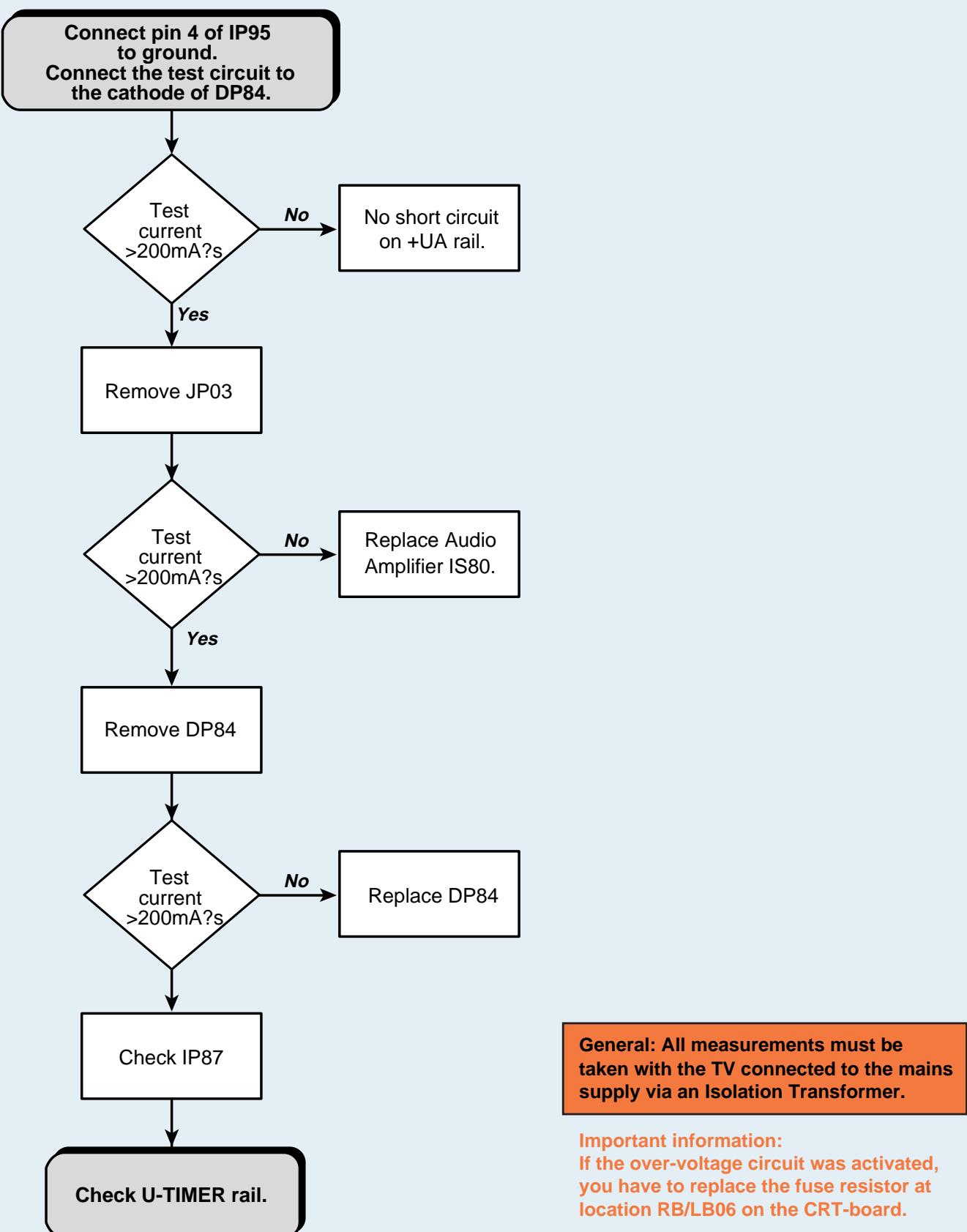


After finishing this test, please replace LL31, remove the link between pins 4 and 9 of IP95 and remove the test circuit.

General: All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.

Important information:
If the over-voltage circuit was activated,
you have to replace the fuse resistor at
location RB/LB06 on the CRT-board.

POWER SUPPLY - SECONDARY SIDE : +UA



TENSIONS SECONDAIRES

Toutes les mesures de ce chapitre doivent être effectuées **SANS** alimentation secteur.
Utiliser une Alimentation continue externe

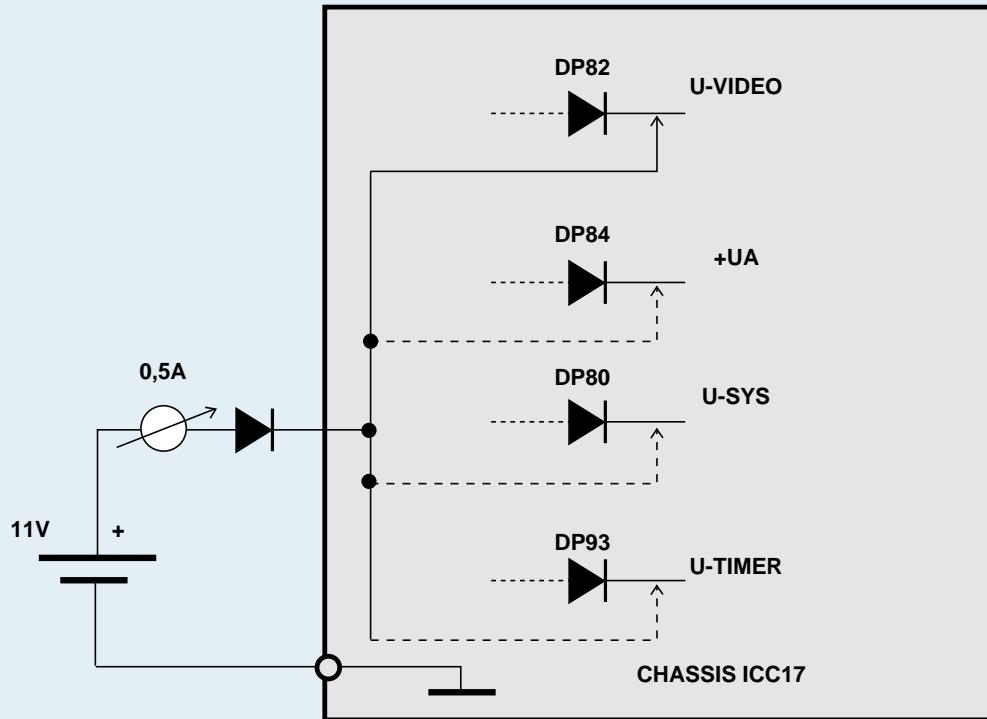
Circuit Test:

L'alimentation externe est une alimentation continue de 11V réglable avec un courant de limitation de 0.5A.

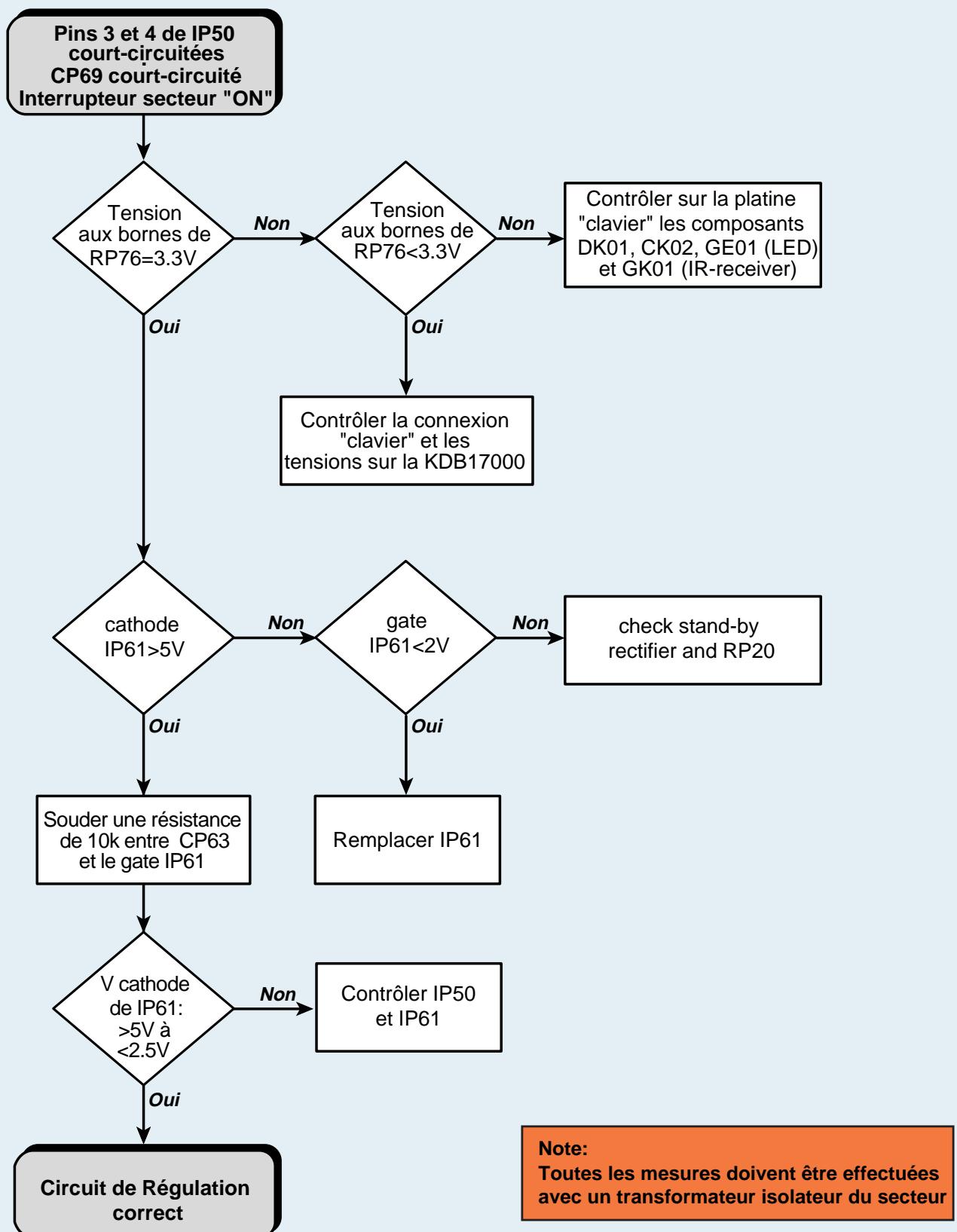
Le pôle - est relié à la masse secondaire du chassis.

Le pôle + de l'alimentation externe sera réunie à travers une diode, aux circuits de charge indiqués en début d'organigramme.(voir schéma ci-contre).

Le courant de charge devra être mesuré.



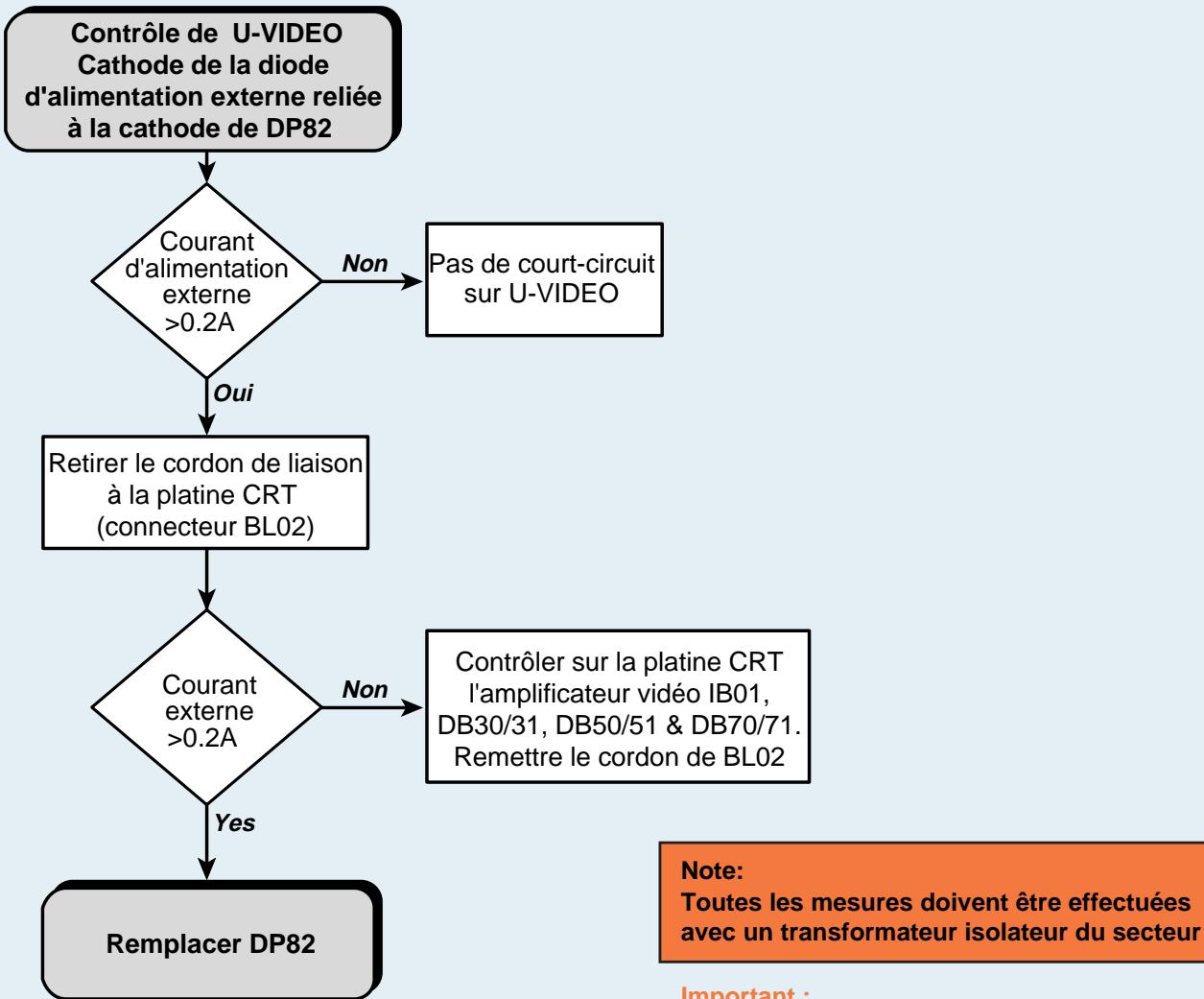
ALIMENTATION STANDBY - PARTIE SECONDAIRE



Après les tests remettre les circuits dans leur configuration d'origine ,
Exemple : Retirer la résistance de 10k et les court-circuits au niveau de CP69 et de IP50.

Important :
Si le circuit de protection contre les sur-tensions est actif remplacer la résistance fusible RB/LB06 de la platine CRT.

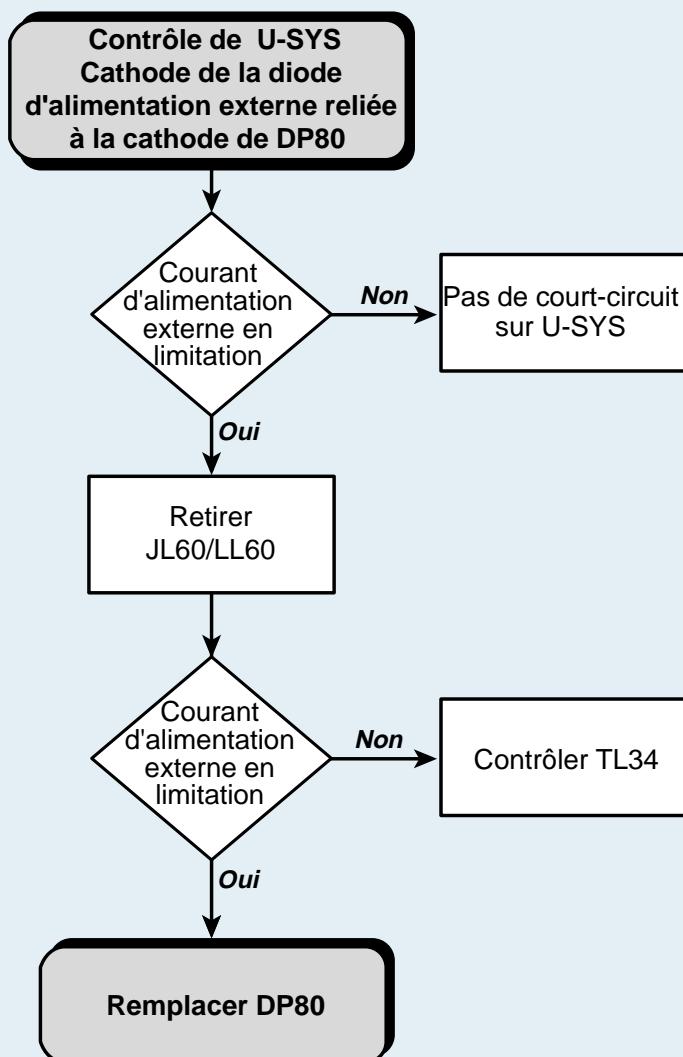
ALIMENTATION - PARTIE SECONDAIRE : U-VIDEO



Après les tests remettre les circuits dans leur configuration d'origine.
Exemple : Remettre le cable de liaison à la CRT : BL02

Important :
Si le circuit de protection contre les
sur-tensions est actif remplacer la résistance
fusible RB/LB06 de la platine CRT.

ALIMENTATION - PARTIE SECONDAIRE : U-SYS

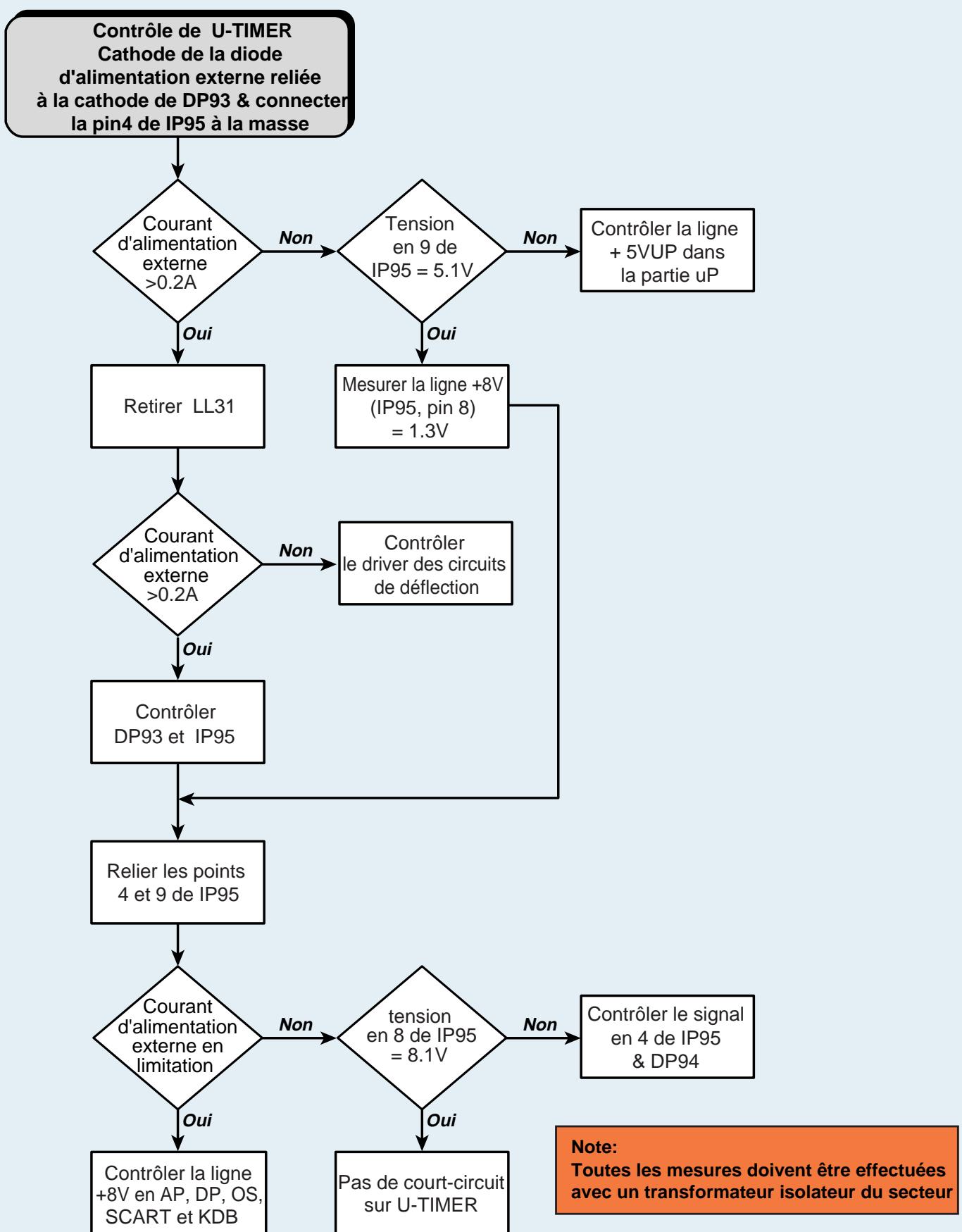


Note:
Toutes les mesures doivent être effectuées
avec un transformateur isolateur du secteur

Après les tests remettre les circuits dans leur
configuration d'origine.
Exemple : JL60 / LL60

Important :
Si le circuit de protection contre les
sur-tensions est actif remplacer la résistance
fusible RB/LB06 de la platine CRT.

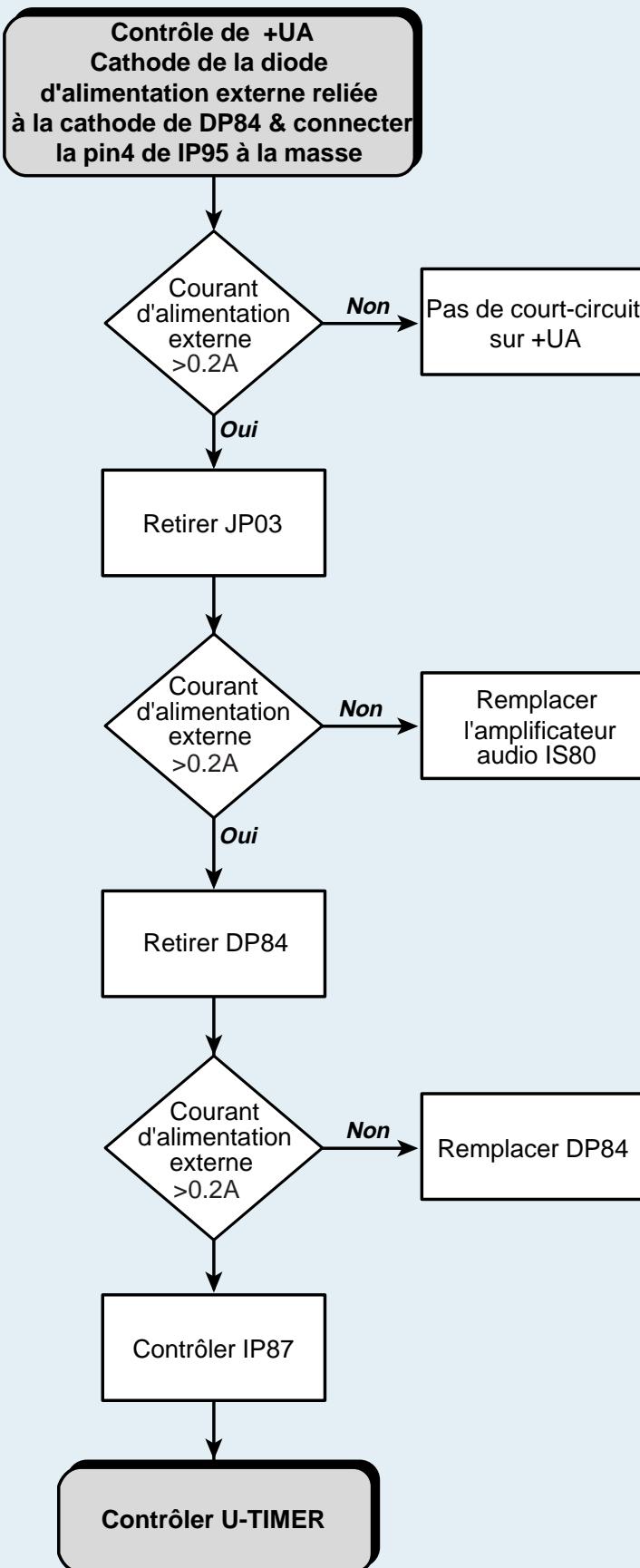
ALIMENTATION - PARTIE SECONDAIRE : U-TIMER



Après les tests remettre les circuits dans leur configuration d'origine.
Exemple : LL31, 4 et 9 de IP95.

Important :
Si le circuit de protection contre les
sur-tensions est actif remplacer la résistance
fusible RB/LB06 de la platine CRT.

ALIMENTATION - PARTIE SECONDAIRE : +UA



Note:
Toutes les mesures doivent être effectuées
avec un transformateur isolateur du secteur

Important :
Si le circuit de protection contre les
sur-tensions est actif remplacer la résistance
fusible RB/LB06 de la platine CRT.

Après les tests remettre les circuits dans leur
configuration d'origine.
Exemple : JP03.

ÜBERPRÜFUNG DER SEKUNDÄRSEITIGEN GLEICHSPANNUNGEN

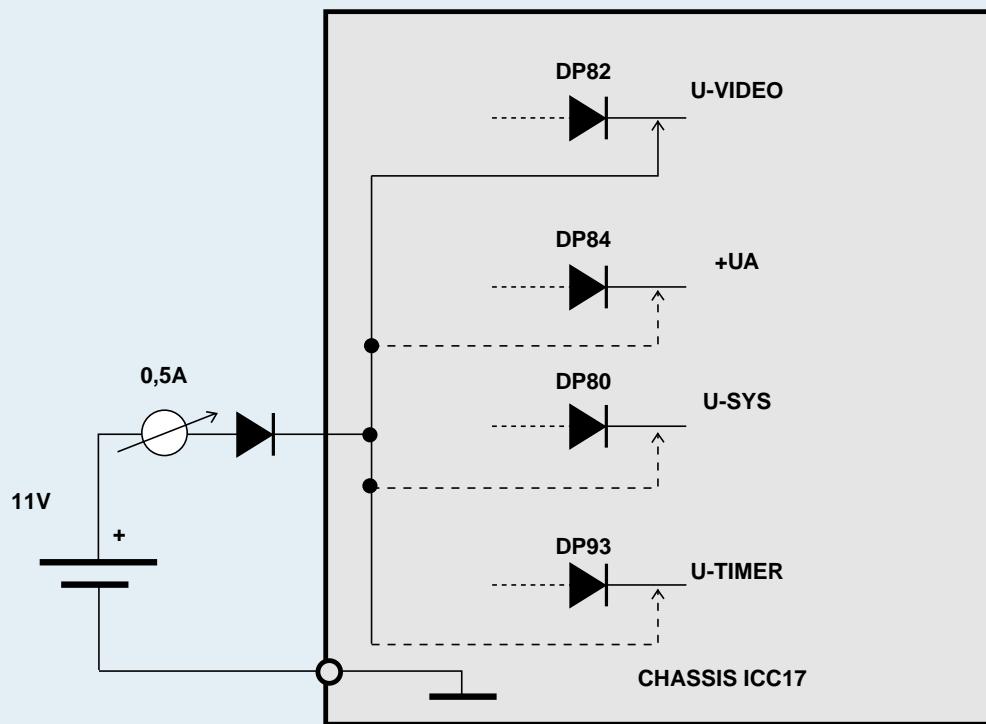
Alle Messungen in diesem Kapitel müssen ohne Netzspannung vorgenommen werden.
Benutzen Sie die Testschaltung.

Testschaltung:

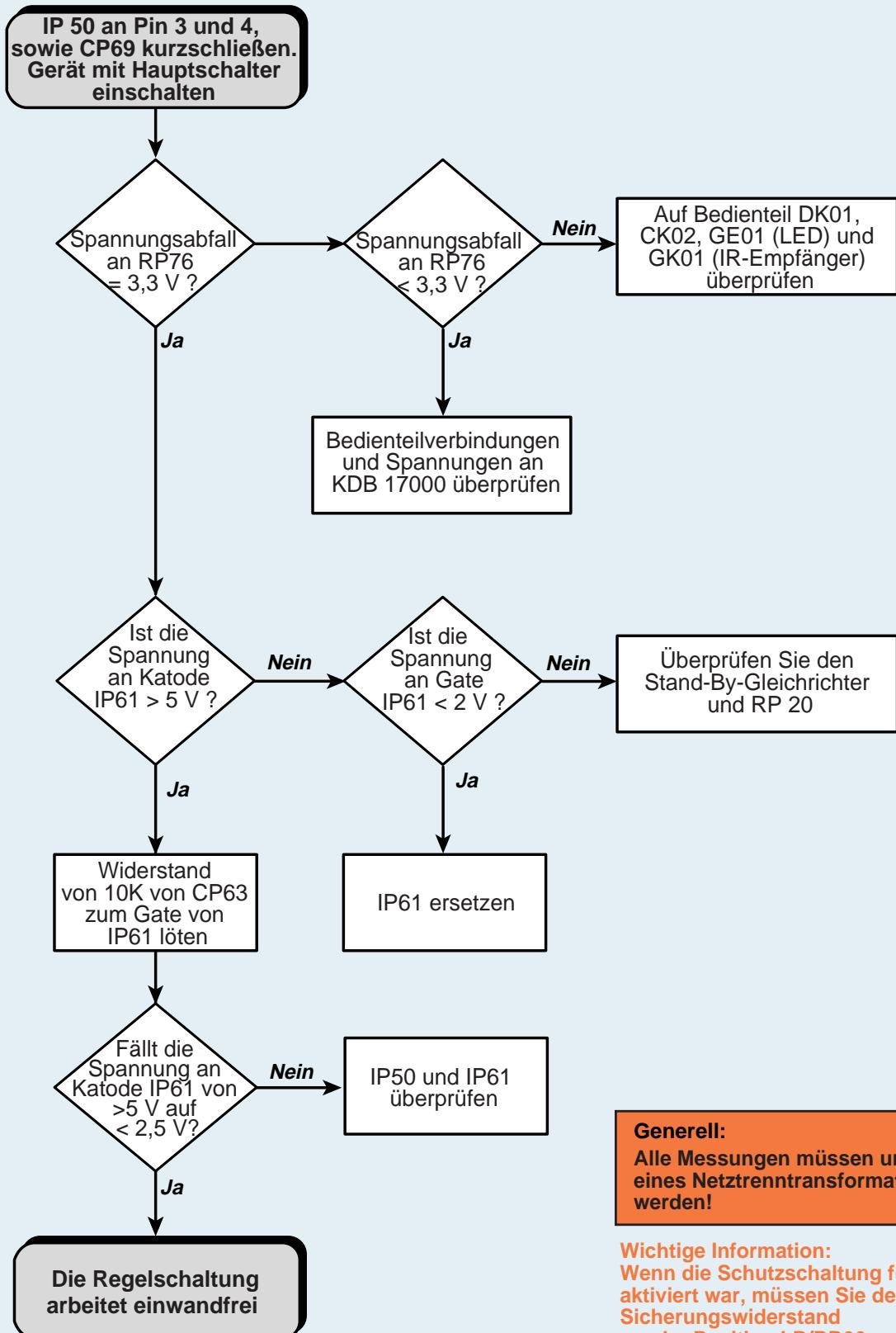
Die externe Spannung ist an ein externes Netzteil mit einer eingestellten Spannung von 11 V und einer Strombegrenzung von 0,5 A angeschlossen

Der Minuspol der externen Spannungsquelle wird direkt mit der Masse des sekundären Netzteils verbunden! Der Pluspol der externen Spannungsquelle wird über eine Diode eingespeist, wobei die Anode dieser Diode mit dem Pluspol verbunden ist. Die Kathode ist mit dem entsprechenden Einspeisepunkt auf dem Chassis verbunden..

Der Strom muß gemessen werden.



STANDBY-BY NETZTEIL SEKUNDÄRSEITE

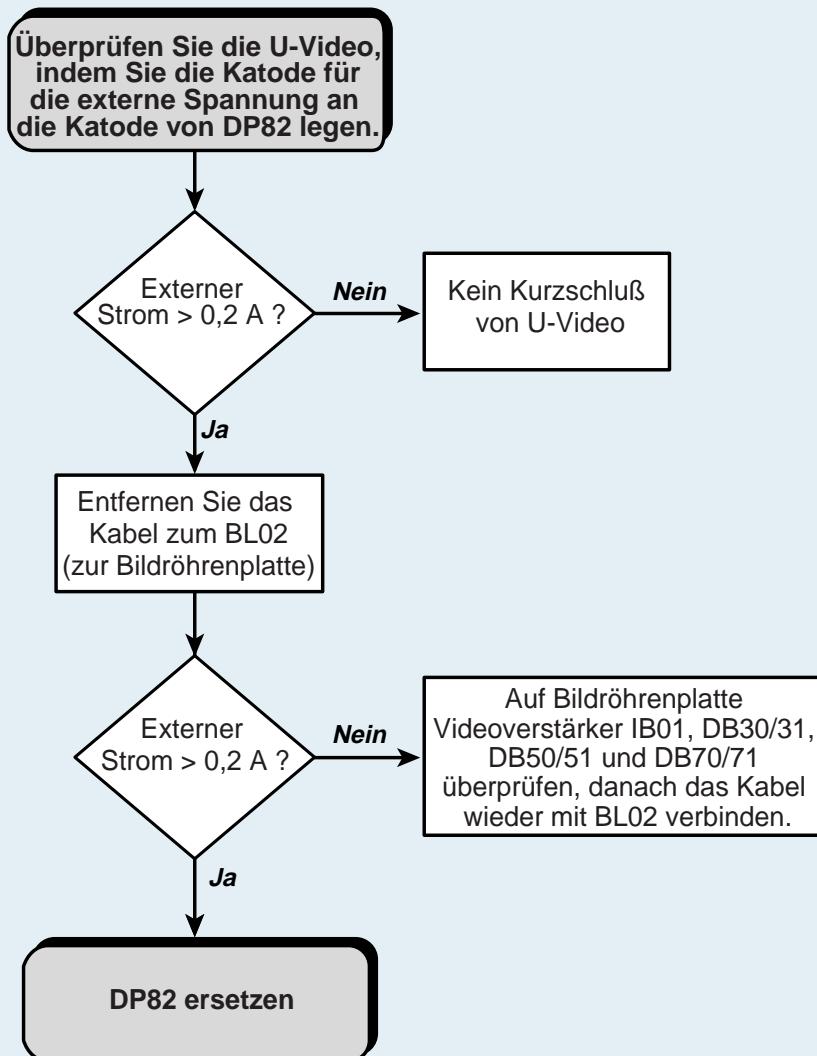


Generell:
Alle Messungen müssen unter Verwendung eines Netztrenntransformators vorgenommen werden!

Wichtige Information:
Wenn die Schutzschaltung für Überspannung aktiviert war, müssen Sie den Sicherungswiderstand an der Position LB/RB06 auf der Bildrohrplatte ersetzen!

Nach Beendigung der Überprüfung alle Modifikationen rückgängig machen, z. B. CP69, IP50, 10K.

HAUPTNETZTEIL SEKUNDÄRSEITE: VIDEOSPANNUNG U-VIDEO

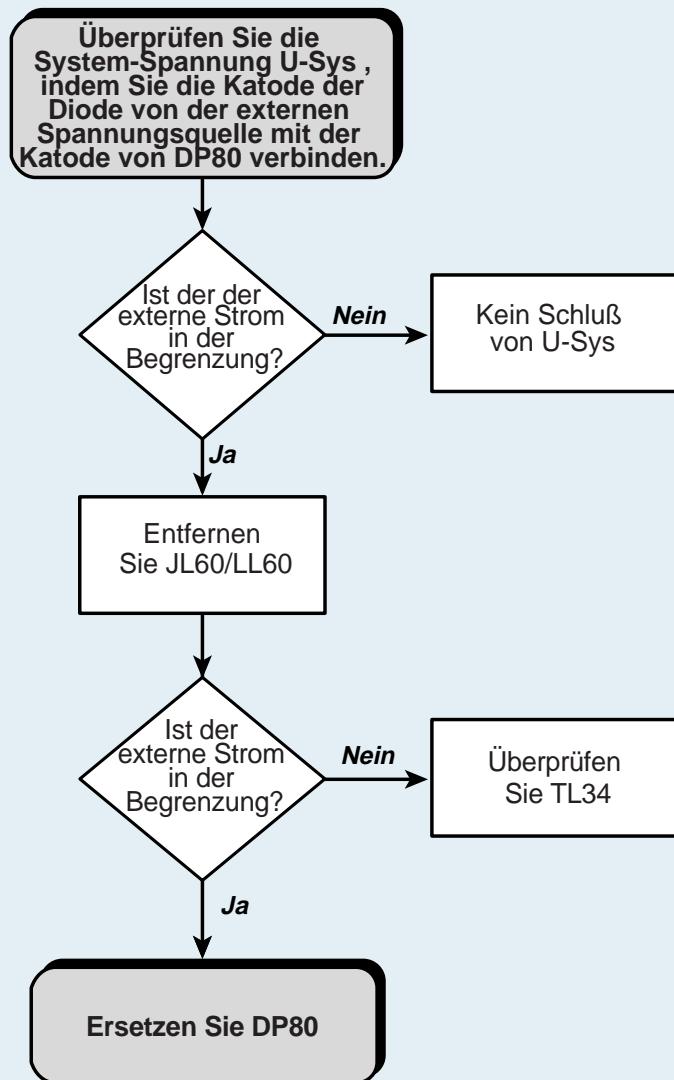


Nach Beendigung der Überprüfung alle Modifikationen rückgängig machen, z. B. BL02!

Generell:
Alle Messungen müssen unter Verwendung eines Netztrenntransformators vorgenommen werden!

Wichtige Information:
Wenn die Schutzschaltung für Überspannung aktiviert war, müssen Sie den Sicherungswiderstand an der Position LB/RB06 auf der Bildrohrplatte ersetzen!

HAUPTNETZTEIL SEKUNDÄRSEITE: SYSTEM-SPANNUNG U-SYS



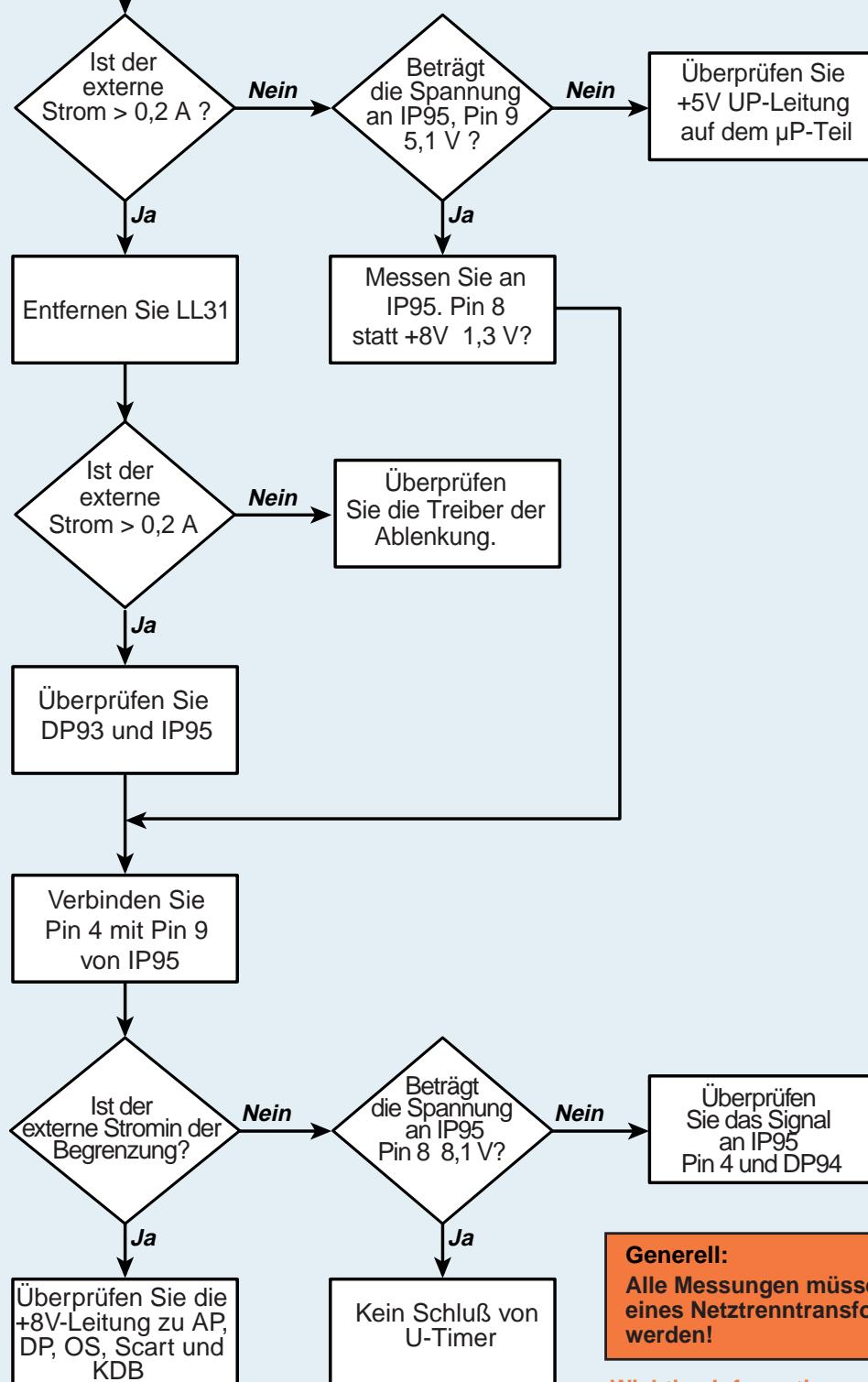
Nach Beendigung der Überprüfung alle Modifikationen rückgängig machen, z. B. JL60/LL60

Generell:
Alle Messungen müssen unter Verwendung eines Netztrenntransformators vorgenommen werden!

Wichtige Information:
Wenn die Schutzschaltung für Überspannung aktiviert war, müssen Sie den Sicherungswiderstand an der Position LB/RB06 auf der Bildrohrplatte ersetzen!

HAUPTNETZTEIL SEKUNDÄRSEITE: TIMER-SPANNUNG U-TIMER

Überprüfen Sie die Timer-Spannung, indem Sie die Katode der Diode von der externen Spannungsquelle mit der Katode von DP93 verbinden und IP95 Pin 4 an Masse legen

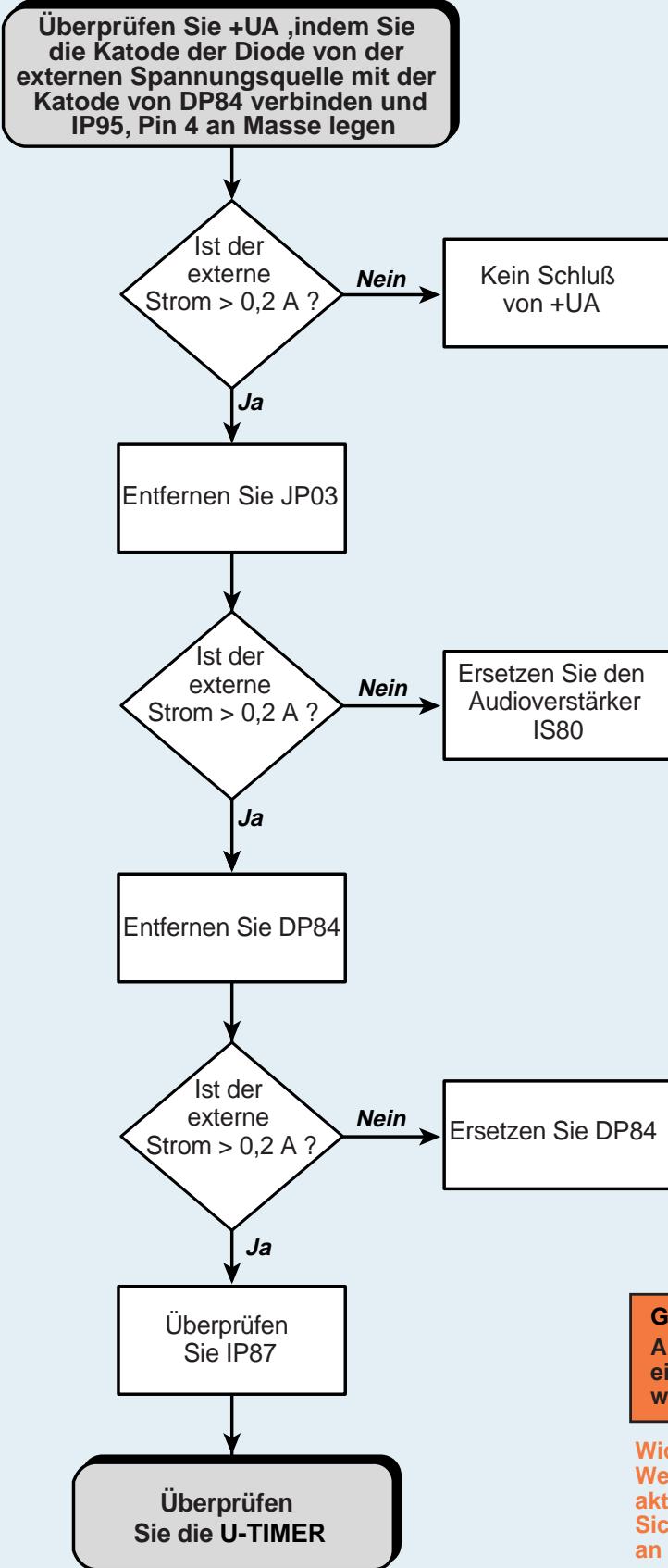


Generell:
Alle Messungen müssen unter Verwendung eines Netztrenntransformators vorgenommen werden!

Wichtige Information:
Wenn die Schutzschaltung für Überspannung aktiviert war, müssen Sie den Sicherungswiderstand an der Position LB/RB06 auf der Bildrohrplatte ersetzen!

Nach Beendigung der Überprüfung alle Modifikationen rückgängig machen, z. B. LL31

HAUPTNETZTEIL SEKUNDÄRSEITE: SPANNUNG +UA



Generell:
Alle Messungen müssen unter Verwendung eines Netztrenntransformators vorgenommen werden!

Wichtige Information:
Wenn die Schutzschaltung für Überspannung aktiviert war, müssen Sie den Sicherungswiderstand an der Position LB/RB06 auf der Bildrohrplatte ersetzen!

VOLTAGGI DC SECONDARI

Tutte le misurazioni in questo capitolo dovrebbero essere fatte SENZA i voltaggi principali.

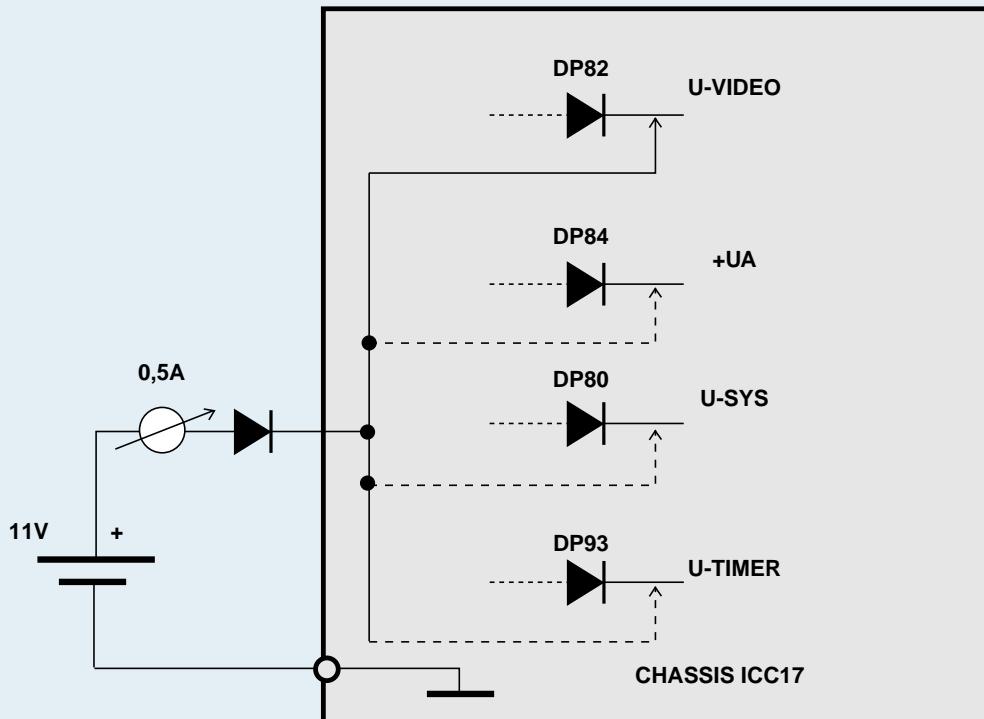
Test del circuito:

il voltaggio esterno è una fornitura d'energia esterna DC con un voltaggio regolato di 11V e una limitazione di corrente a 0,5A.

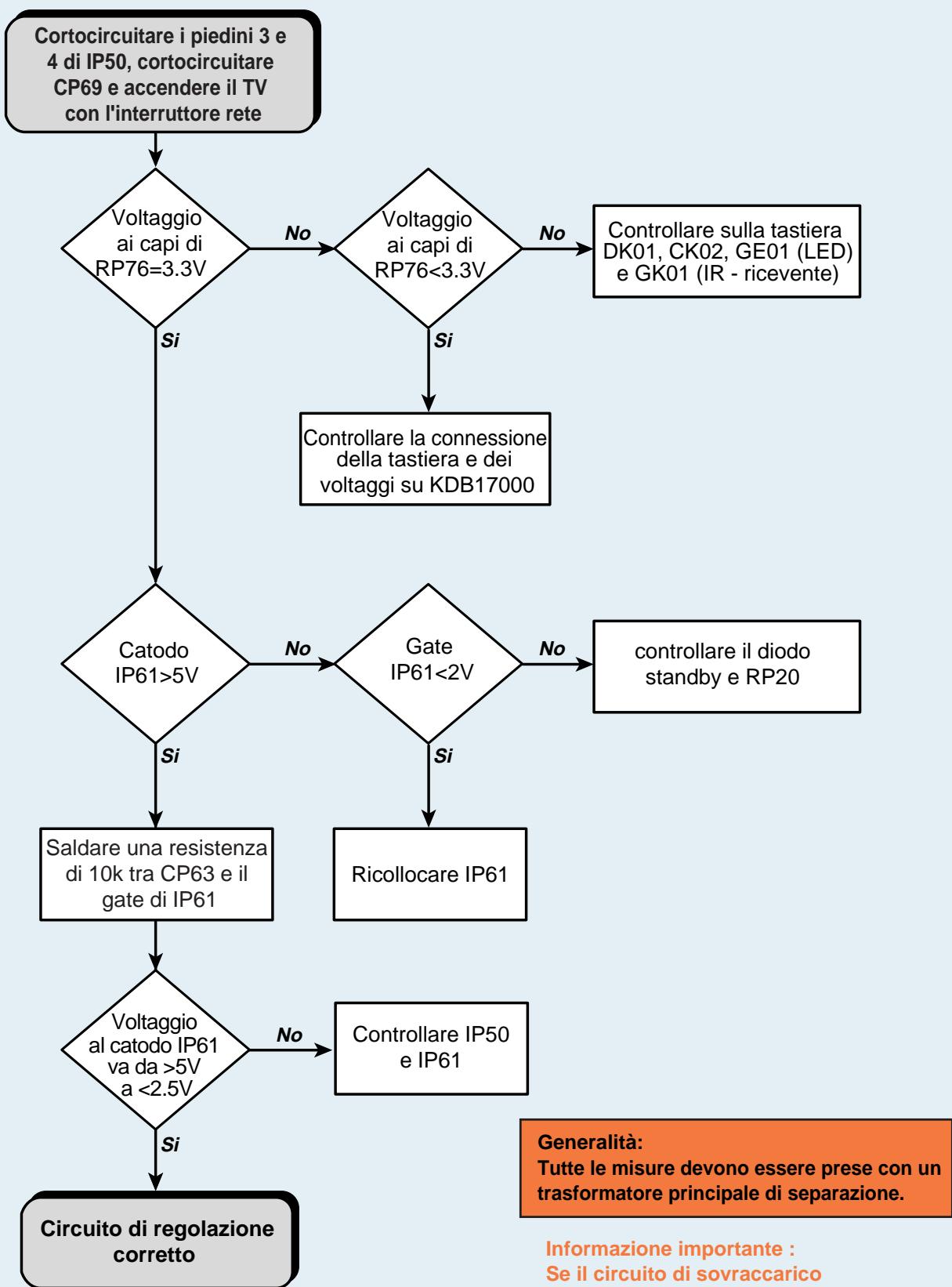
Il polo della fornitura del voltaggio esterno deve essere direttamente connesso al campo secondario del telaio.

Il polo + della fornitura del voltaggio esterno fornisce il carico tramite un diodo.

L'anodo di questo diodo è connesso al polo +, il catodo è connesso al carico sul telaio. La corrente deve essere misurata.

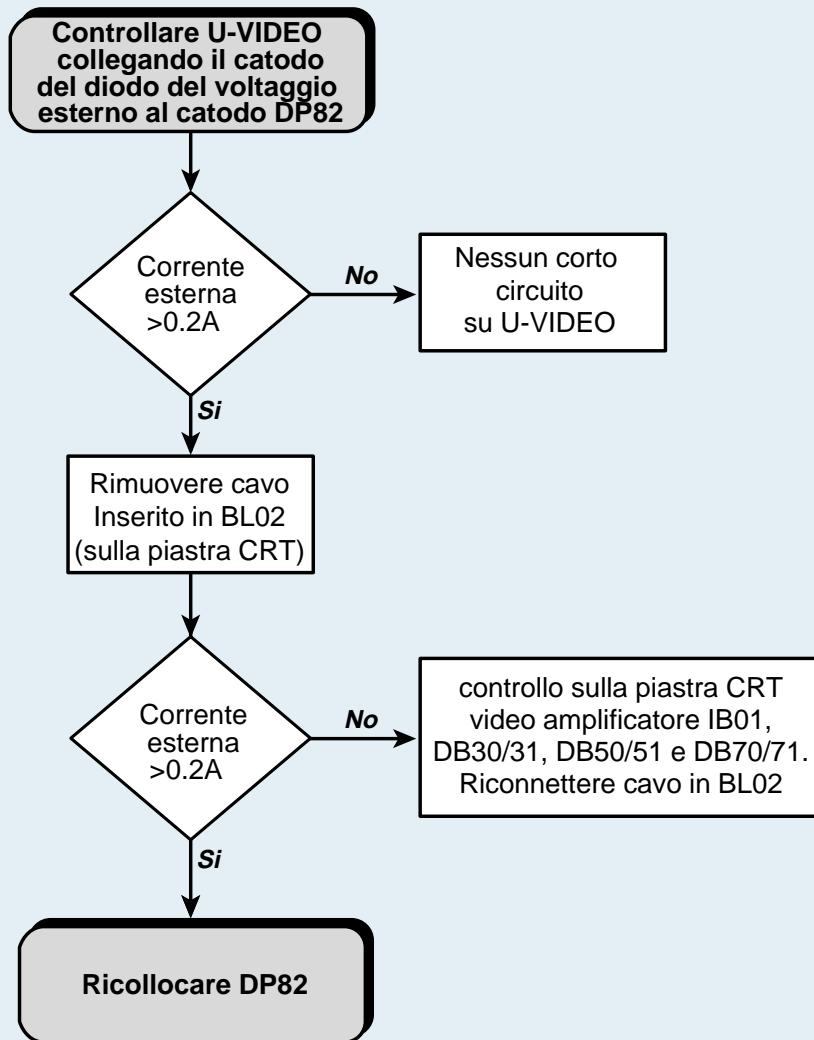


ALIMENTAZIONE STANDBY – LATO SECONDARIO



Alla fine, riportare il circuito all'origine (togliere la resistenza di 10k e i cortocircuiti di CP69, IP50).

ALIMENTAZIONE – LATO SECONDARIO : U-VIDEO



Alla fine, reportare il circuito all'origine. Es: collegare il cavo in BL02

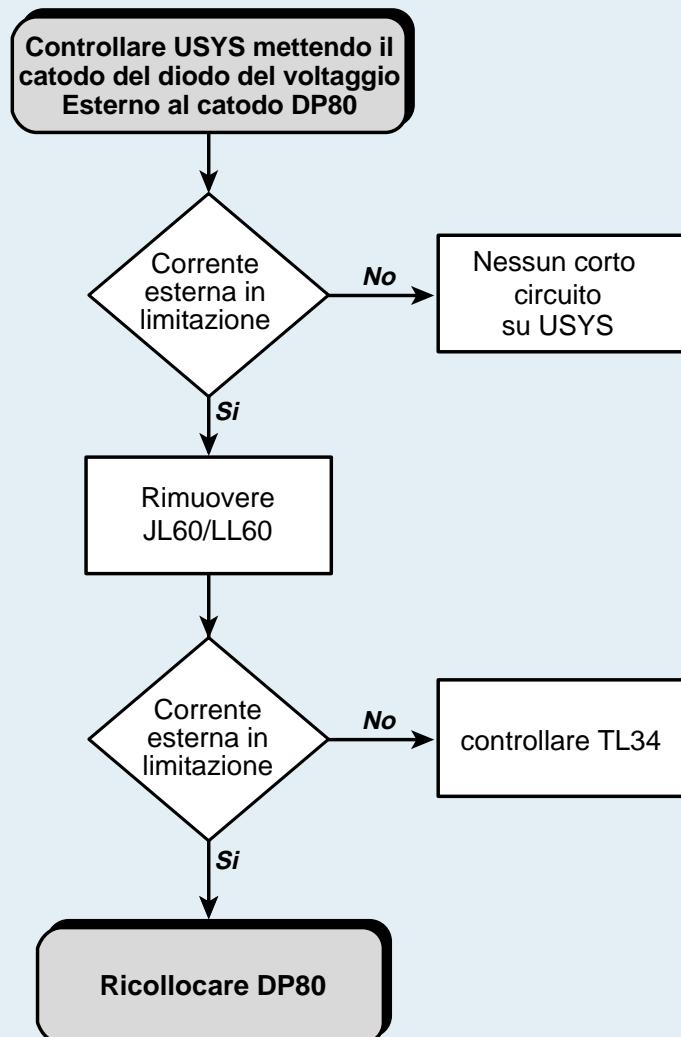
Generalità:

Tutte le misure devono essere prese con un trasformatore principale di separazione.

Informazione importante :

Se il circuito di sovraccarico era attivato, sostituite la resistenza fusibile nella posizione RB/LB06 sulla piastra CRT.

ALIMENTAZIONE – LATO SECONDARIO : U-SYS



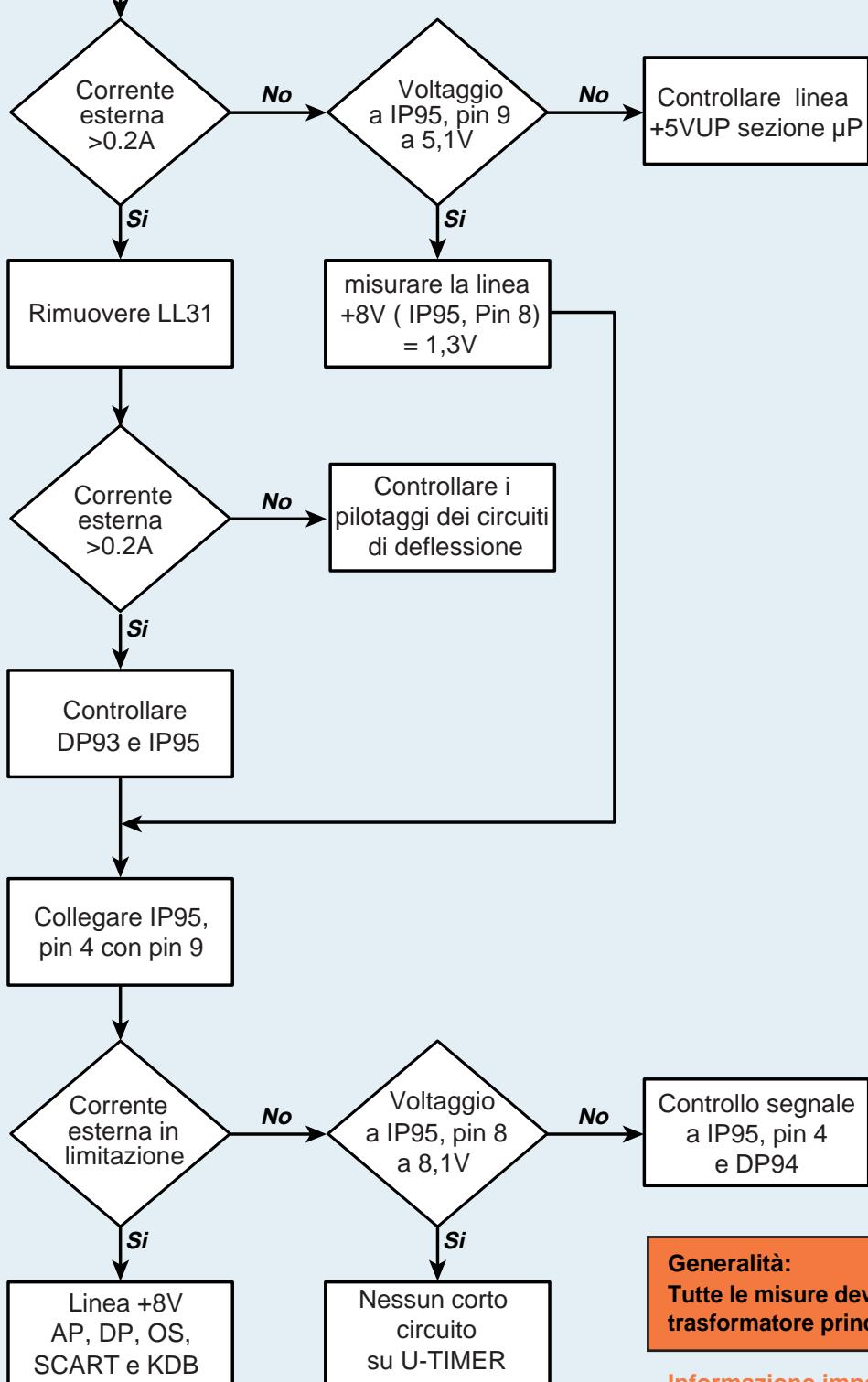
Alla fine, riportare il circuito all'origine (modificare JL60/LL60)

Generalità:
Tutte le misure devono essere prese con un trasformatore principale di separazione.

Informazione importante :
Se il circuito di sovraccarico era attivato, sostituite la resistenza fusibile nella posizione RB/LB06 sulla piastra CRT.

ALIMENTAZIONE – LATO SECONDARIO : U-TIMER

Controllare U-TIMER mettendo il catodo del diodo del voltaggio esterno al catodo DP93 e collegare IP95, Pin 4 a GND



Alla fine, riportare il circuito all'origine (modificare LL31)

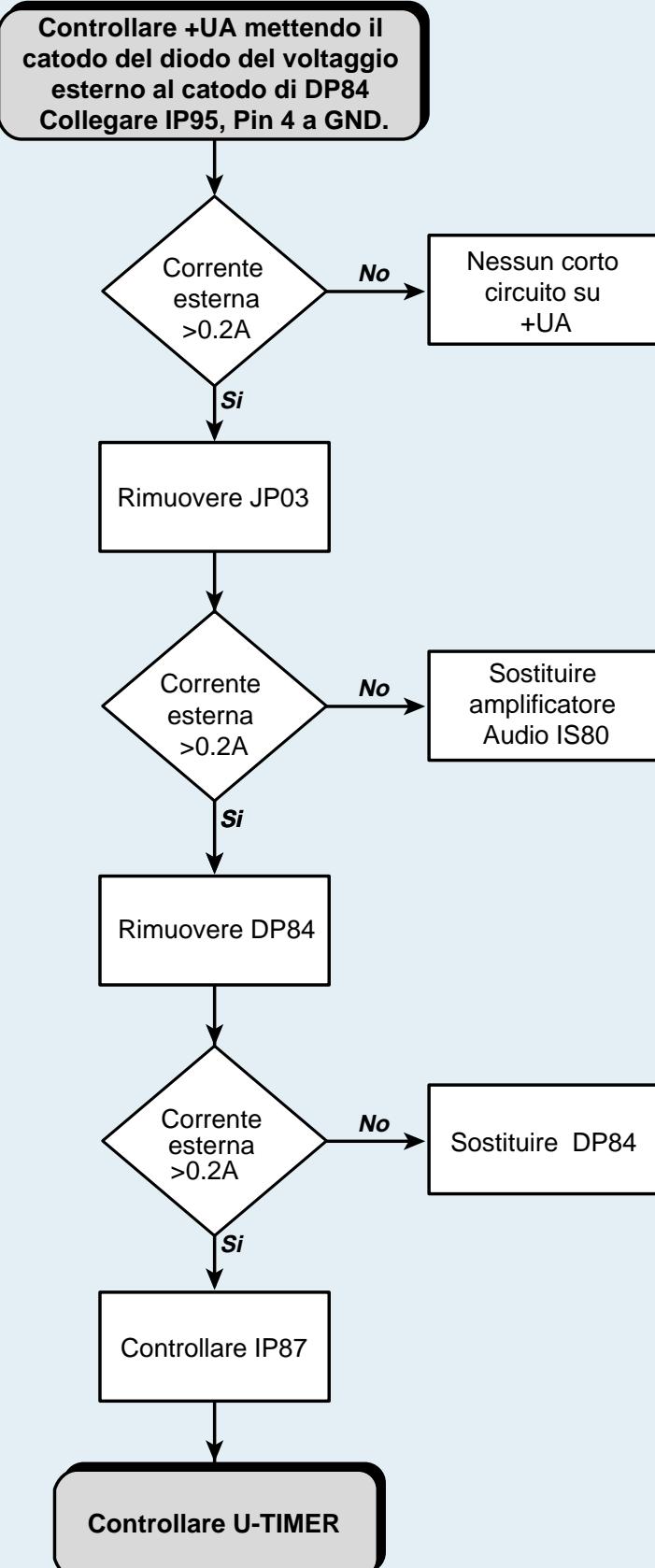
Generalità:

Tutte le misure devono essere prese con un trasformatore principale di separazione.

Informazione importante :

Se il circuito di sovraccarico era attivato, sostituite la resistenza fusibile nella posizione RB/LB06 sulla piastra CRT.

ALIMENTAZIONE – LATO SECONDARIO : +UA



Generalità:

Tutte le misure devono essere prese con un trasformatore principale di separazione.

Informazione importante :
Se il circuito di sovraccarico era attivato, sostituite la resistenza fusibile nella posizione RB/LB06 sulla piastra CRT.

VOLTAJES DC SECUNDARIOS

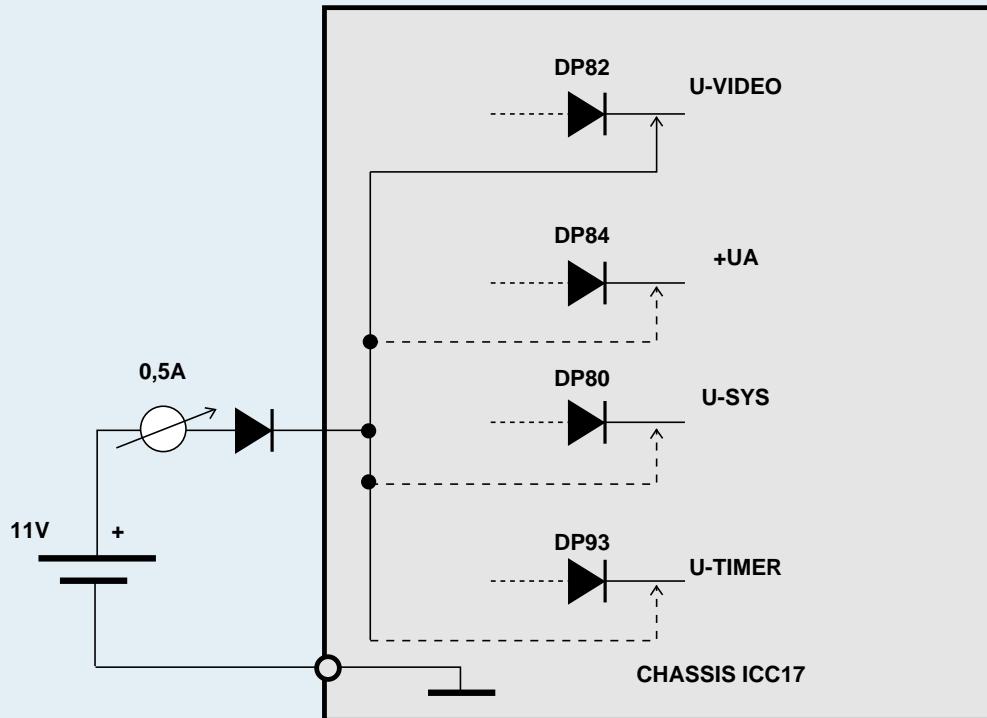
Todas las mediciones en este capítulo deberán hacerse SIN tensión de sector.

Test circuito:

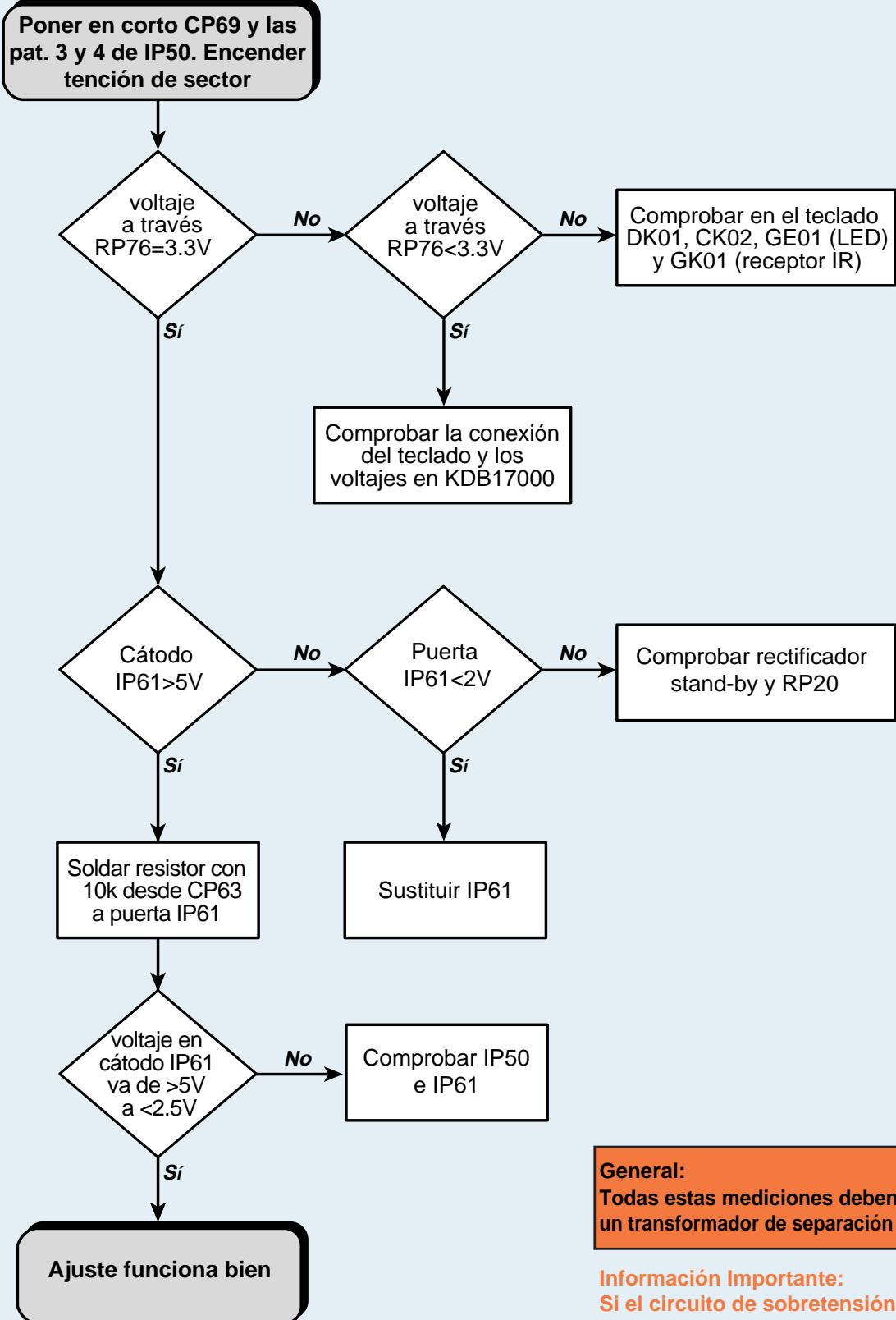
El voltaje externo es una alimentación DC externa con un voltaje ajustado de 11V y una limitación de corriente de 0.5A. El polo de la alimentación del voltaje externo debe estar directamente conectado a toma de tierra secundaria del chasis.

El polo+ de la alimentación del voltaje externo alimenta la carga a través de un diodo.

El ánodo del diodo está conectado al polo+, el cátodo de este diodo está conectado a la carga en el chasis. La corriente debe ser medida.



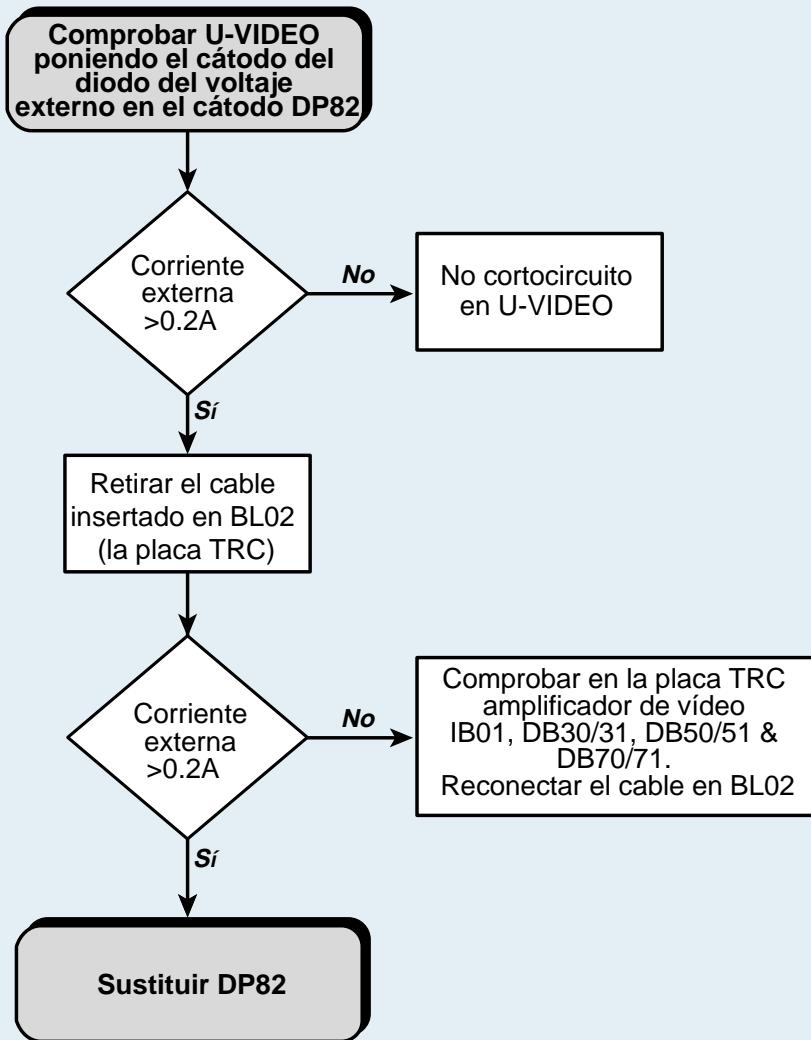
ALIMENTACION STAND BY – LADO SECUNDARIO



Después de acabar la comprobación, restituya cada modificación, p. ej. CP69, IP50, 10k

Información Importante:
Si el circuito de sobretensión estaba activado, hay que cambiar el fusible resistor en posición RB/LB06 en la placa TRC.

ALIMENTACION – LADO SECUNDARIO : U-VIDEO

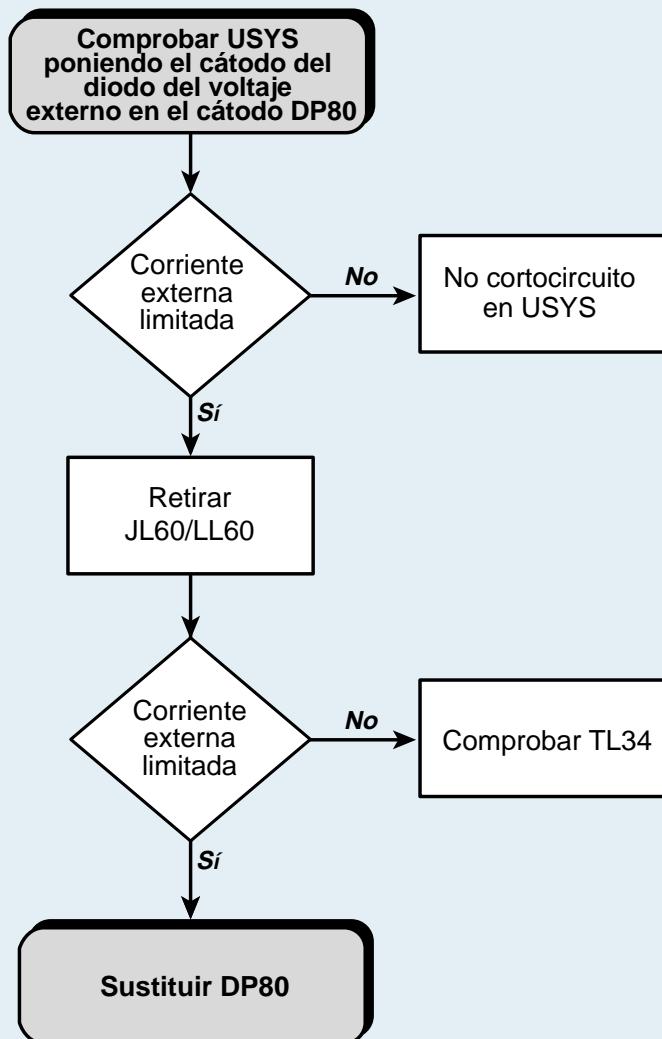


Después de acabar la comprobación, restituya cada modificación, p. ej. BL02

General:
Todas estas mediciones deben hacerse con
un transformador de separación de alimentación.

Información Importante:
Si el circuito de sobretensión estaba activado,
hay que cambiar el fusible resistor en posición
RB/LB06 en placa TRC.

ALIMENTACION – LADO SECUNDARIO : U-SYS

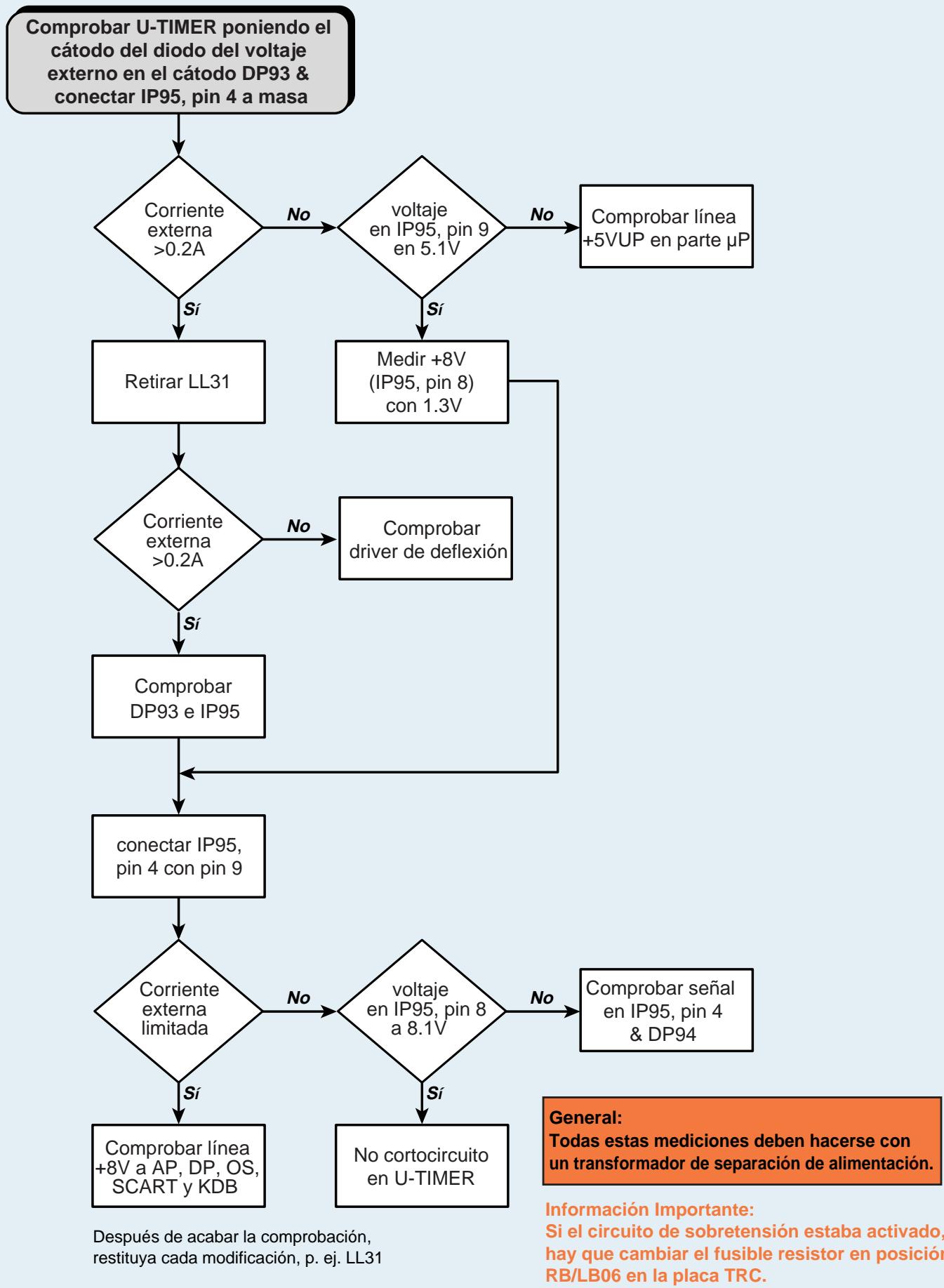


Después de acabar la comprobación,
restituya cada modificación, p. ej. JL60/LL60

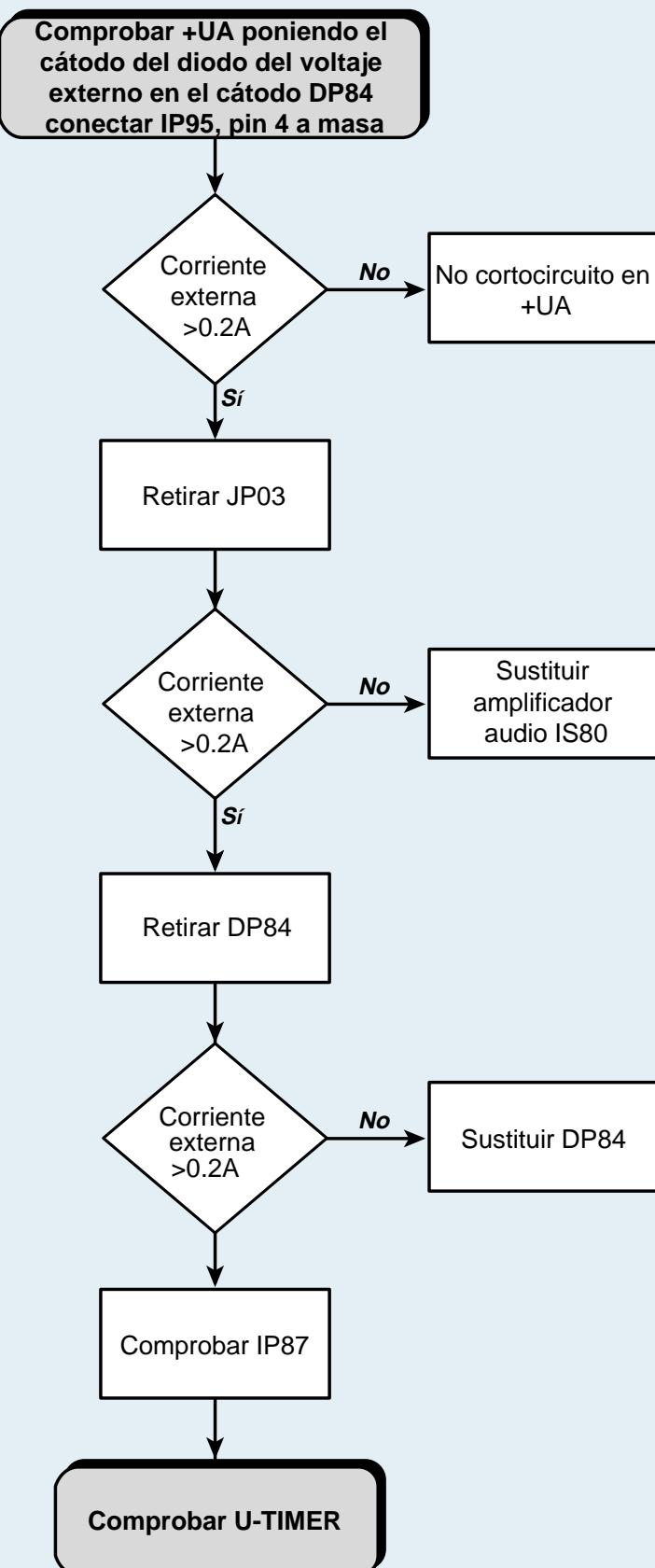
General:
Todas estas mediciones deben hacerse con
un transformador de separación de alimentación.

Información Importante:
Si el circuito de sobretensión estaba activado,
hay que cambiar el fusible resistor en posición
RB/LB06 en la placa TRC.

ALIMENTACION – LADO SECUNDARIO : U-TIMER



ALIMENTACION – LADO SECUNDARIO : +UA



General:
Todas estas mediciones deben hacerse con un transformador de separación de alimentación.

Información Importante:
Si el circuito de sobretensión estaba activado, hay que cambiar el fusible resistor en posición RB/LB06 en la placa TRC.

GENERAL INFORMATION

METHODOLOGY

1 - ON POWER-UP :

- Observe the behaviour of the two-coloured LED: note the various stages and compare them to the normal cycle.

By doing this, the time at which the problem arose and the part of the circuit which needs to be investigated can be identified.

2 - TROUBLE SHOOTING PROCEDURE: LED BEHAVIOUR

In certain cases the LED will flash when transmitting a message:

LED flashing : message being transmitted.

Count the flashes : code is two bursts separated by a pause of 0.7 s and repeated several times.

See the error code table.

LIST OF LED MESSAGE
ERROR CODES

This data is more precise than colour changes but still incomplete, since various causes may generate the same code.

3 - FAULT FINDING :

Carryout of stages 1 and 2: an oscilloscope test may clarify the code transmitted in stage two.

a - The television set operates fully or partially

- Use LED message observation fault finding methods 1 and 2. See also the faults listed relating to fault finding by symptom.

b - The television goes into permanent or cyclical security mode

- Observe LED's behaviour (flashing red, stable orange followed by flashing, etc.).
Select the relevant box in the column (LED behaviour fault finding).

INFORMATIONS GENERALES

METHODOLOGIE

1 - AU DEMARRAGE :

- Observer le comportement de la LED bicolore ; noter les différentes étapes et les comparer au cycle normal.
Ceci permet d'identifier le moment où le problème apparaît et vers quelle partie du chassis s'orienter.

2 - DEMARCHE DE DEPANNAGE : COMPORTEMENT DE LA LED

Dans certains cas le voyant clignote en émettant un message :

Clignotement de la LED : Emission d'un message.

- Compter les clignotements : codés sur deux salves séparées par un temps d'arrêt de 0.7s et répétées plusieurs fois.

Se reporter au tableau de code erreur .

**LISTE DES CODES PANNEES
MESSAGES LED**

Ces informations sont plus précises que les changements de couleur mais pas complètes car plusieurs causes différentes peuvent générer le même code.

3 - RECHERCHE DE LA PANNE :

- Exploitation des étapes 1 et 2 : une recherche par oscilloscope s'effectue selon deux voies distinctes .

a - Le chassis se met en fonctionnement complet ou partiel :

- Utiliser les démarches 1 et 2 de recherche par observation du message émis par la LED.
Voir également les pannes concernées dans la recherche par symptômes.

b - Le chassis se met en sécurité permanente ou cyclique :

- Observer le comportement de la LED (rouge clignotant , orange stable suivi d'un clignotement ...) Sélectionner le cas correspondant dans cette rubrique (recherche par «comportement de la LED»).

ALLGEMEINE INFORMATIONEN

VORGEHENSWEISE

1 - BEIM EINSCHALTEN

Beobachten Sie das Verhalten der 2-farbigen LED: Merken Sie sich das Einschaltverhalten und vergleichen Sie es mit den normalen Zyklen.

Hierdurch kann die Zeit bis der Fehlerzeitpunkt und die zu überprüfende Stufe festgestellt werden.

2 - TROUBLE SHOOTING ABLAUF: LED-VERHALTEN

In bestimmten Fällen leuchtet die LED zum Übertragen einer Fehlerinformation auf:

LED Aufleuchten: Übertragung der Fehlerinformation

Zählen der Fehlerinformation: Kodiert in zwei Impulsbündeln, unterbrochen durch 0,7 s Pause.

Dieses wiederholt sich mehrere Male.

Sehen Sie in der Fehlercodetabelle

Liste der LED Informationen
Fehler-Codes

Diese Informationen sind genauer als Farbänderungen aber unvollständig, da verschiedene Ursachen denselben Code verursachen.

3 - FEHLERSUCHE

Funktionen der Stufen 1 und 2: Messungen mit dem Oszilloskop sind für die beiden separaten Vorgänge durchzuführen.

a - Das Gerät arbeitet ganz oder teilweise:

- Benutzen Sie die LED Informationen der Fehlersuchmethode 1 und 2.
- Schauen Sie ebenfalls bei Fehlersuche nach Symptomen nach.

b - Das Fernsehgerät schaltet permanent oder periodisch ab:

- Beobachten Sie das LED-Verhalten (rotes Aufleuchten, konstantes orange gefolgt von Aufleuchten, usw.)
- Wählen Sie das zutreffende Kästchen in der Spalte: Fehlersuche durch LED-Verhalten.

INFORMAZIONI GENERALI

METODOLOGIA

1 - DURANTE L'ACCENSIONE :

- Osservare il comportamento del LED bicolore; verificare le diverse fasi e confrontarle con il ciclo normale.

Ciò consente di identificare il momento in cui il problema si verifica e di quale parte del telaio occuparsi.

2 - RICERCA E CORREZIONE DEI GUASTI : COMPORTAMENTO DEL LED

In alcuni casi la spia luminosa lampeggiava visualizzando un messaggio :

Lampeggiamento del LED: visualizzazione di un messaggio.

- Contare i lampeggiamenti: codificati su due serie separate da un tempo di arresto di 0,7 sec. e ripetuti più volte.

Riferirsi alla tabella dei codici d'errore.

**ELENCO DEI CODICI DI GUASTO
MESSAGGI LED**

Queste informazioni sono più precise dei cambiamenti di colore ma non sono complete, poiché più cause diverse possono generare il medesimo codice.

3 - RICERCA DEI GUASTI :

Sfruttando le fasi 1 e 2; la ricerca mediante l'oscilloscopio viene eseguita in due modi distinti.

a - Il telaio funziona completamente o parzialmente :

- Utilizzare la sequenza 1 e 2 di ricerca osservando i messaggi visualizzati dal LED. Vedere anche i guasti relativi nella ricerca per sintomi.

b - Il telaio entra in sicurezza permanente o ciclica :

- Osservare il comportamento del LED (rosso lampeggiante, arancione stabile seguito da un lampeggiamento...). Selezionare il caso corrispondente in questa tabella (ricerca per "comportamento del LED")

INFORMACIÓN GENERAL

PROCEDIMIENTO

1 - AL ENCENDERLO

- Observar el funcionamiento del LED: distinga las etapas y compárelas con el ciclo normal. Este procedimiento le permite identificar la etapa en la que surge el problema y la parte del chasis donde resolverlo.

2 -RESOLUCIÓN DE PROBLEMAS : FUNCIONAMIENTO DEL LED

En algunas ocasiones, el LED parpadea al emitir un mensaje :

LED parpadea: emisión del mensaje.

Cuenta de los parpadeos: codificado en dos intervalos separados por una pausa de 0.7 seg. y repetidos varias veces.

Consulte la tabla de códigos de error

LISTA DE LOS CÓDIGOS
DE ERROR DEL LED

Estos datos son más precisos que los de color aunque incompletos, dado que varias causas distintas pueden crear el mismo código.

3 - LOCALIZACIÓN DE FALLOS :

Para las etapas 1 y 2: se realiza una localización por medio del osciloscopio de dos maneras distintas.

a - El televisor funciona completa o parcialmente

- Utilice los métodos 1 y 2 de localización por observación del mensaje emitido por el LED. Vea también otros fallos relacionadas al hacer la localización por síntomas.

b - El televisor pasa al modo de seguridad permanente o cíclico

- Observe el funcionamiento del LED (rojo parpadeante, naranja fijo seguido de un parpadeo, etc.). Seleccione el defecto dependiente del código de error observado (localización por funcionamiento del LED).

GENERAL INFORMATION - LED BEHAVIOUR

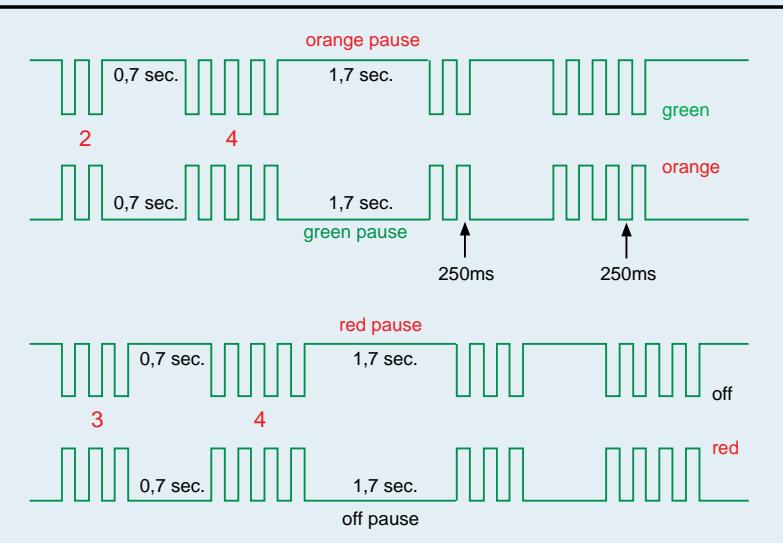
LED FLASHES

Message transmission.

The Error codes are signalled by the TV's red LED.

Count the number of flashes : error code is two burst separated by a pause of 0.7sec. and repeated four times..

There is 1.7 sec. between each codes sequence .



currently all known ICC17 TV sets are fitted with a Bicoloured LED, the red part is the Standby LED whilst, the green part is directly connected to the switched +8V supply. Therefore, the colour of the LED will depend upon the state of this voltage, the chart below gives the corresponding LED-colours:

LED-port	
switched +8V	off
on	green
off	red

CODES	DEFAULTS
14	IC TDA8855H DOES NOT ANSWER
15	AUDIO PROCESSOR NO LONGER RESPONDING.
21	SDA LINE BEING HELD LOW
23	CLOCK JAMMED AT LOW LEVEL, SCL LINE JAMMED AT LOW LEVEL.
25	SWITCHED 5V NOT AVAILABLE
26	TUBE DOES NOT GET WARM IN TIME
27	THE DETECTION SYSTEM HAS DETECTED PROTECTION ON MORE THAN THREE OCCASIONS (DOES THIS MEAN THAT A PROBLEM HAS BEEN DETECTED ON THE BREATING LINE?).
28	SCANNING PROBLEM AFTER 2 S, THE PROGRAM TRIES TO PERFORM A START.
34	THE NVM CHIP DOES NOT ANSWER
36	WRONG NVRAM ADDRESS PASSED TO THE BUS-HANDLER
37	UNEXPECTED LEVEL ON NMI (INTERRUPT) LINE FOUND (POSSIBLE CAUSE : TUBE FLASHOVER)
41	BUS (DATA LINE) NOT RECOVERABLE

COMPORTEMENT DE LA LED - CODES PANNE

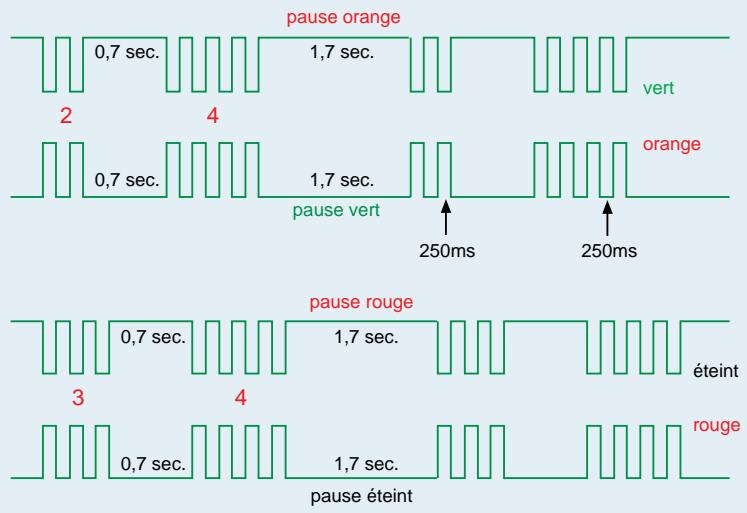
CLIGNOTEMENT DE LA LED

Emission d'un message.

Codes pannes visualisés par l'intermédiaire de la LED rouge.

Ces codes sont composés de deux chiffres, séparés d'une pause de 0.7 seconde.

Ils sont répétés 4 fois. Un temps de 1,7 s sépare deux codes pannes.



Dans les chassis CONNUS ICC17, une diode LED bicolore est insérée. La partie rouge de celle-ci est la LED standby tandis que la partie verte est directement connectée au +8V commuté. La couleur de cette dernière est représentée dans le tableau ci-dessous selon les valeurs ON et OFF du +8V

LED-port	
switched +8V	off on
on	green orange
off	off red

CODES	DEFAUTS
14	TDA8855H NE REPOND PLUS
15	PROCESSEUR AUDIO NE REPOND PLUS
21	LIGNE SDA AU NIVEAU BAS
23	CLOCK AU NIVEAU BAS, LIGNE SCL AU NIVEAU BAS
25	5V COMMUTE N'EST PAS DISPONIBLE
26	LE TUBE NE CHAUFFE PAS À TEMPTS
27	MODULE AUDIO NON DETECTE
28	PROBLEME DE BALAYAGE A MOIN DE 2S LE PROGRAMME ESSAIE DE FAIRE UN DEMARRAGE
34	PROBLEME NVM, MEMOIRE NE REPOND PLUS
36	ADRESSE NVM NON TROUVEE
37	PROBLEME DETECTE SUR LA LINE "INT" PENDANT LE DEMARRAGE OU LE FONCTIONNEMENT DU TV "ARKING"
41	I2C BUS DATA RESTE BLOQUE

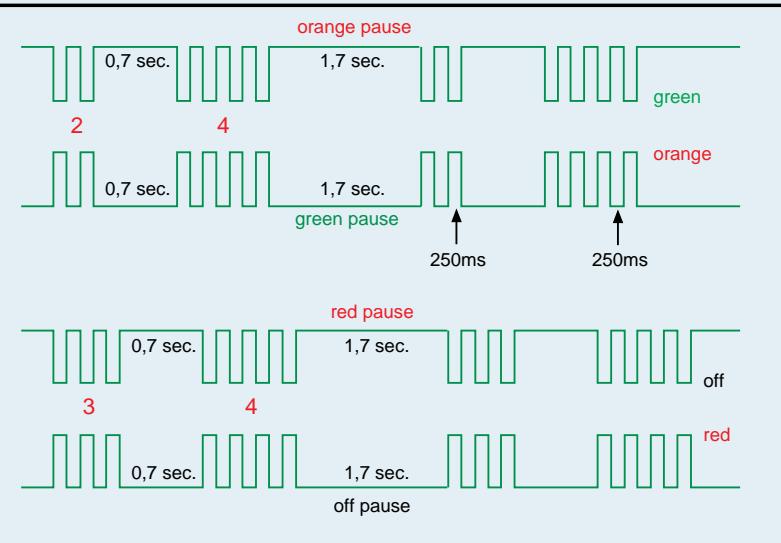
ALLGEMEINE INFORMATIONEN - LED VERHALTEN

LED BLINKZEICHEN

Übermittlung von Informationen

Die Fehler-Codes werden von der roten LED angezeigt.

Zählen Sie die Leuchtmpulse: Sie werden in zwei Blinkfolgen, abgetrennt durch eine Pause von 0,7 sek., Sie werden fünf Mal wiederholt. Zwischen jeweils zwei Codes ist eine Pause von 1,7 sek.



Im CONNUS ICC17 Rahmen ist eine Zwei-Farben-LED eingebaut: Die rote Anzeige ist im Stand-By aktiviert, die grüne Anzeige bedeutet, daß die 8V- Stromversorgung eingeschaltet ist. Die Farbe der grünen LED ist in der Tabelle unten entsprechend der Ein- und Ausschaltwerte der 8V Stromversorgung aufgeführt.

	LED-port	
switched +8V	off	on
on	green	orange
off	off	red

CODES	FEHLER
14	IC TDA8855H ANTWORTET NICHT
15	AUDIOPROZESSOR SPRICHT NICHT MEHR AN
21	BUS DATA LINE IST AUF LOW
23	DER CLOCK-IMPULS HÄNGT AM L-PEGEL FEST, SCL-LINE HÄNGT AM UNTEREN PEGEL FEST
25	GESCHALTETE 5V NICHT VORHANDEN
26	RÖHRE WIRD NICHT RECHTZEITIG WARM
27	DAS SCHUTZSCHALTUNGSSYSTEM HAT MEHR ALS DREI STÖRFÄLLE ENTDECKT. (KÖNNTE ES SEIN, DÄß ES EIN PROBLEM IN DER BREATING-VERBINDUNG GIBT?)
28	ABTASTPROBLEM NACH 2 SEK. DAS PROGRAMM VERSUCHT EINEN NEUSTART.
34	NVM CHIP ANTWORTET NICHT
36	DIE ADRESSE DES NVM WURDE NICHT GEFUNDEN.
37	UNERWARTETER ZUSTAND AN NMI (INTERRUPT) LINE GEFUNDEN. (MÖGLICHE URSCHE = RÖHREN-ÜBERSCHLAG")
41	BUS (DATA LINE) NICHT MÖGLICH ZU REAKTIVIEREN

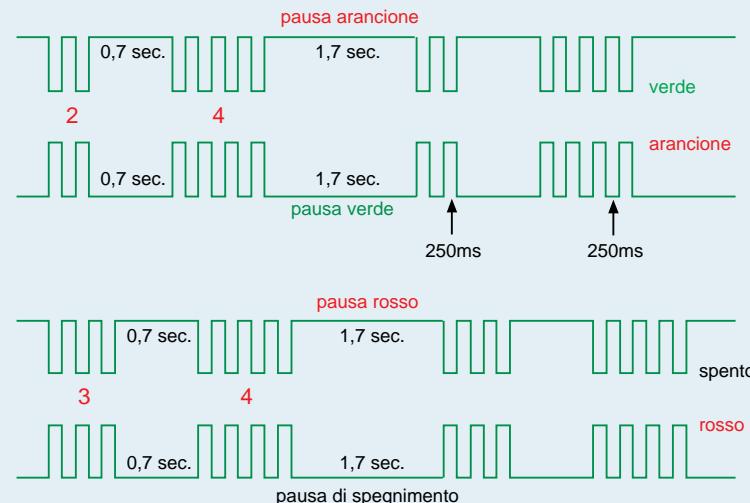
INFORMAZIONI GENERALI - COMPORTAMENTO DEL LED

LAMPEGGI LED : Trasmissione messaggi.

I codici errore vengono indicati dal diodo LED rosso del TV.

Contare i lampeggi: codificati in due gruppi di impulsi separati da una pausa di 0,7 secondi, sono ripetuti 4 volte.

I due pacchetti di impulsi sono distanziati di 1,7 secondi.



Nel telaio CONNUS ICC17, un diodo LED bicolore è inserito.

La parte rossa del diodo è il LED attesa invece la parte verde è direttamente collegata al +8V commutato. Il colore di quest'ultima è rappresentato nella tavola qui sotto secondo i valori ON e OFF di +8V

	LED-port	
switched +8V	off	on
on	green	orange
off	off	red

CODICE	PROBLEMA
14	TDA8855H NON RISPONDE
15	PROCESSORE AUDIO NON RISPONDE PIÙ.
21	LINEA SDA FORZATA BASSA
23	CLOCK BLOCCATO AL LIVELLO BASSO, LINEA TERRA BLOCCATA AL LIVELLO BASSO
25	LA TENSIONE 5V COMMUTATI NON DISPONIBILE
26	IL TUBO NON RAGGIUNGE LA CORRETTA TEMPERATURA NEL TEMPO STABILITO.
27	PIÙ DI 3 VOLTE LA RILEVAZIONE HA SCOPERTO UNA «PROTEZIONE» (CIOÈ CIÒ UN PROBLEMA SCOPERTO SULLA LINEA «BREAKING»?).
28	PROBLEMA DI SCANSIONE DOPO 2S, IL PROGRAMMA PROVA A FARE UN AVVIO.
34	IL CHIP NVM NON RISPONDE
36	INDIRIZZO NVM NON TROVATO.
37	LIVELLO IMPREVISTO SULLA LINEA NMI
41	BUS I2C (LINEA DATI) NON RIPRISTINABILE

FUNCIONAMIENTO DEL LED - CÓDIGOS DE AVERÍAS

PARPADEO DEL LED

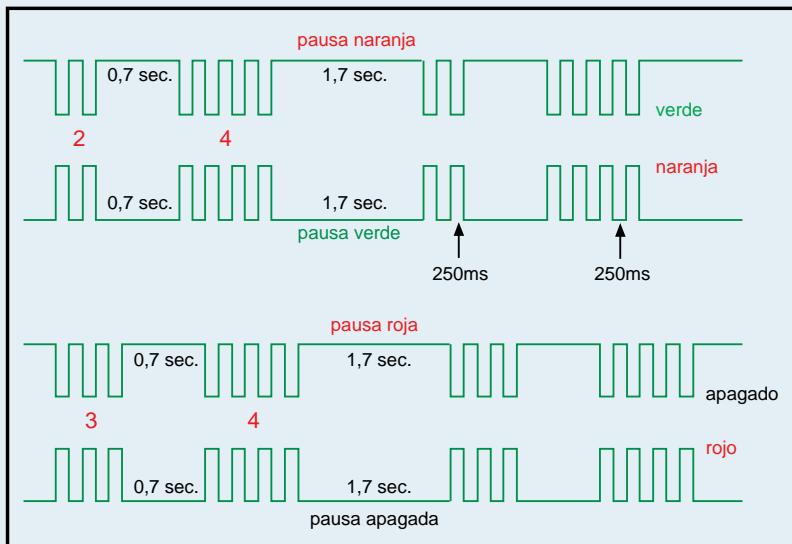
Emisión de un mensaje.

Códigos averías visualizados por el LED roja.

Contar los parpadeos, clasificados en dos intervalos separados por un tiempo de parada de 0,7 seg.

Se repiten 4 veces.

Un tiempo de 1.7s separa dos códigos averías.



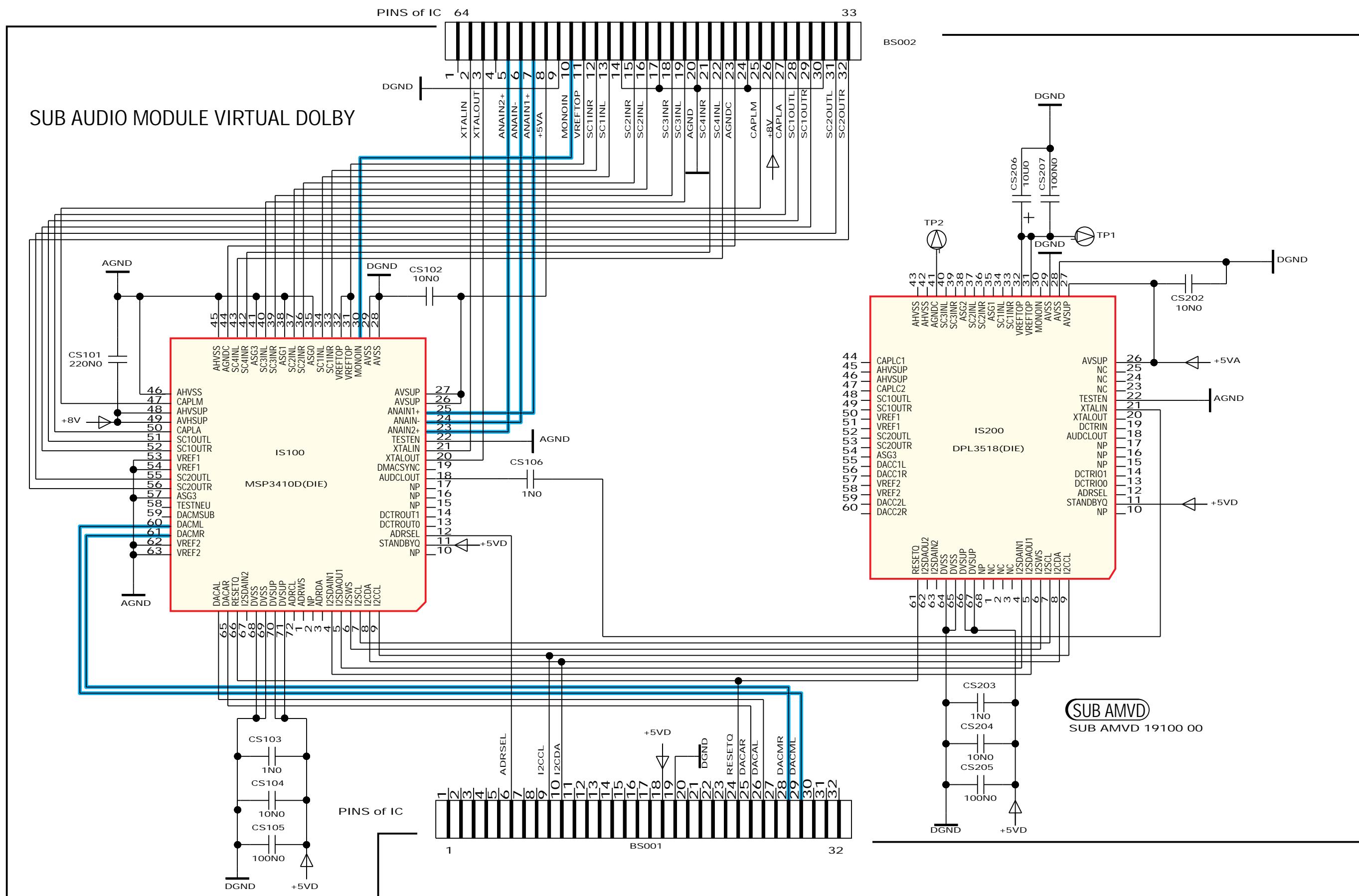
En los chasis ICC17, está insertado un diodo LED bicolor.

La parte roja es el LED standby mientras que la parte verde está directamente conectada con el +8V conmutado. El color de esta última está representado en el cuadro indicado a continuación según los valores ON y OFF del +8V

	LED-port	
switched +8V	off	on
on	green	orange
off	off	red

CÓDIGOS	DEFECTOS
14	CIR. INTEGRADO DE VIDEO TDA8855H NO RESPONDE
15	EL PROCESADOR AUDIO NO RESPONDE.
21	DATA DEL BUS I2C PERMANECE EN BAJO
23	CLOCK BLOQUEADO EN NIVEL BAJO, LÍNEA SCL BLOQUEADA EN NIVEL BAJO
25	NO SE DISPONE DE LOS "5v CONMUTADOS"
26	EL TUBO TARDA EN CALENTARSE
27	LA PROTECCIÓN DE LA DEFLEXIÓN ACTÚA MAS DE 3 VECES (EL PROBLEMA SE DETECTA EN LA LÍNEA DE "BREATHING")
28	PROBLEMA DE BARRIDO. DESPUÉS DE 2s, INTENTA ARRANCAR DE NUEVO
34	LA MEMORIA NO VOLÁTIL X24C32 NO RESPONDE
36	DIRECCIÓN NVM NO LOCALIZADA.
37	PROBLEMA DETECTADO EN LA LÍNEA "Interrupt" DURANTE EL ARRANQUE O EL FUNCIONAMIENTO DEL TV. POSIBILIDAD DE CHISPAZOS EN MUY ALTA?
41	DATA DEL BUS I2C PERMANECE BLOQUEADO

SUB AUDIO SIGNAL MODULE - SUB MODULE AUDIO - AUDIO SIGNAL SUBMODUL - SUB MODULO AUDIO



POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN

(5) : standby

Note :
During measurements in the power supply unit

- Use the primary power unit ground (PGND).

Attention :

Mesure dans le bloc alimentation
- Utiliser la masse du bloc alimentation (PGND).

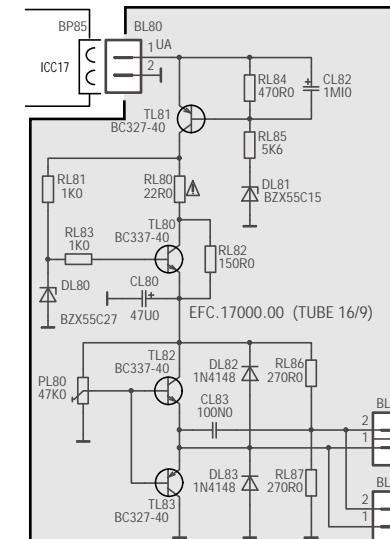
Achtung :
Bei Messungen im Primärnetzteil
- Primärnetzteilmasse verwenden (PGND).

Attenzione :
misura nell'alimentatore primario
- usare massa alimentazione primario (PGND).

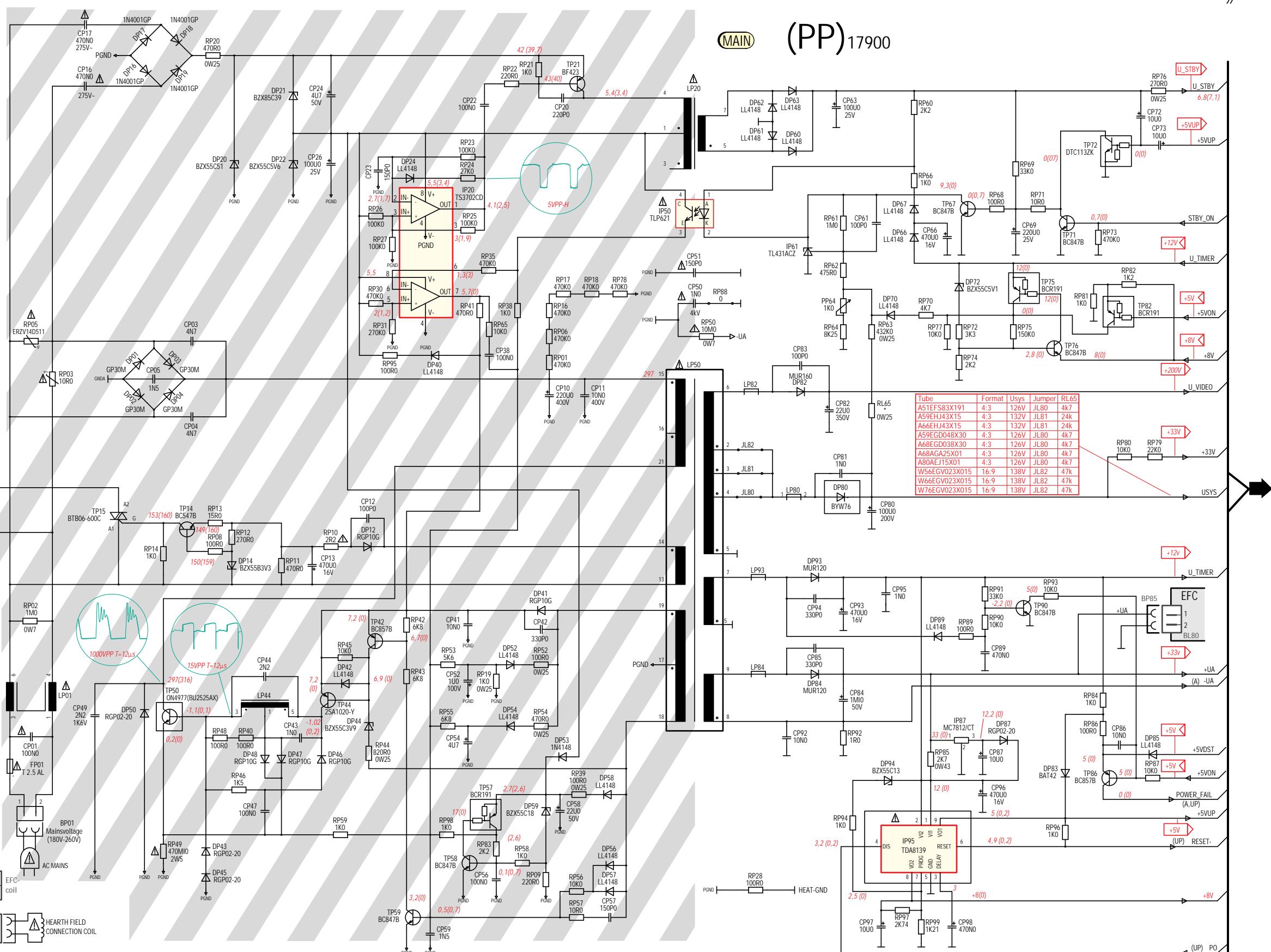
Cuidado :
Medida en el bloque de alimentacion
- Utilizar la masa del bloque de alimentacion (PGND).

Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello chassis collegata alla rete.
Parte del chassis conectada a la red.

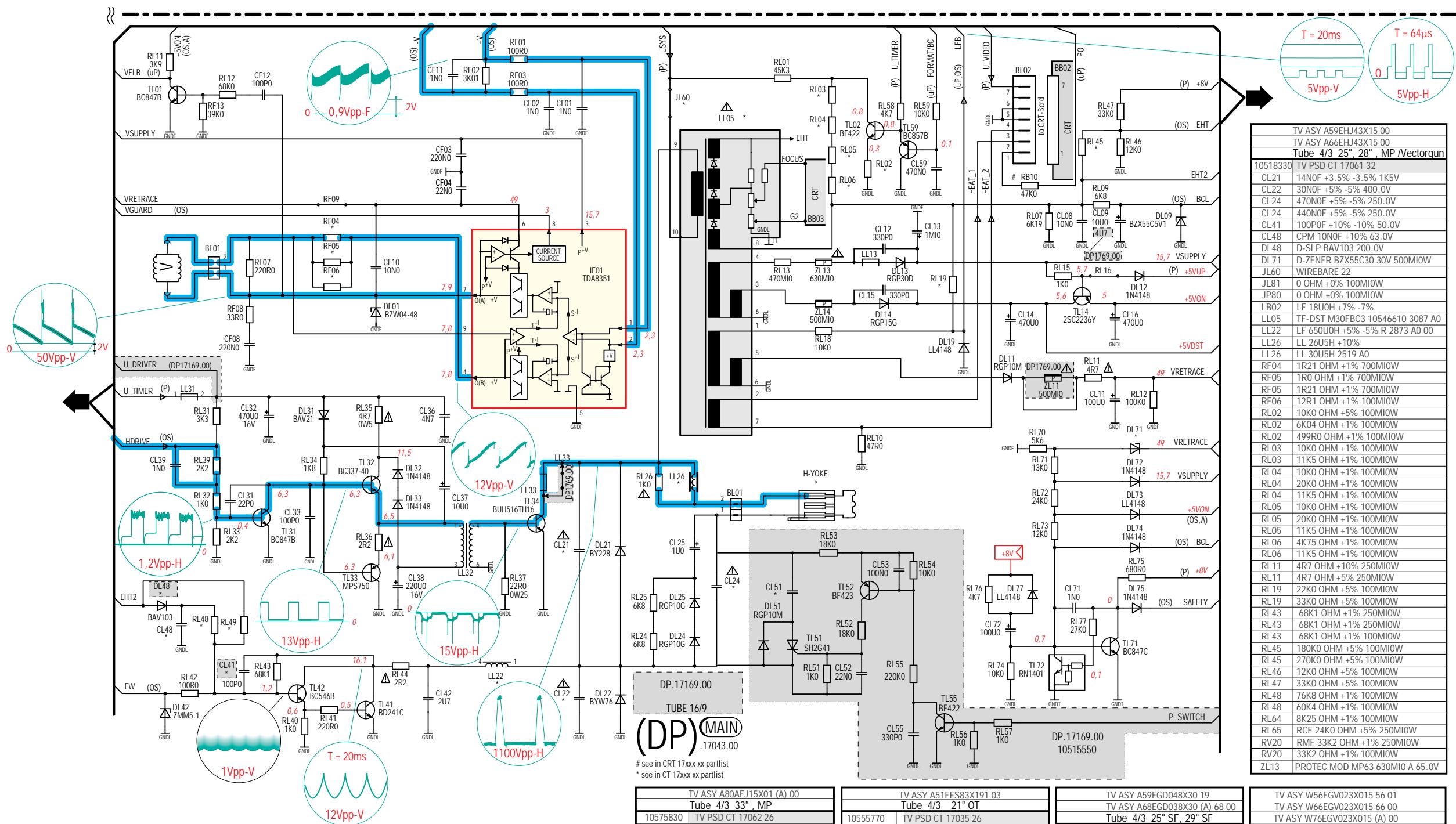
To DEGAUSSING-COIL



Use isolating mains transformer - Utiliser un transformateur isolateur du secteur - Einen Trenntrafo verwenden
Utilizar un transformador aislador de red - Utilizzare un trasformatore per isolarlo dalla rete



SCANNING - BALAYAGE - ABLENKUNG - BARRIDO - SCANSIONE



⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.

Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) durch nicht normgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (contrassegnati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio.

In tal caso é "esclusa la responsabilità" del costruttore.

La substitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato.

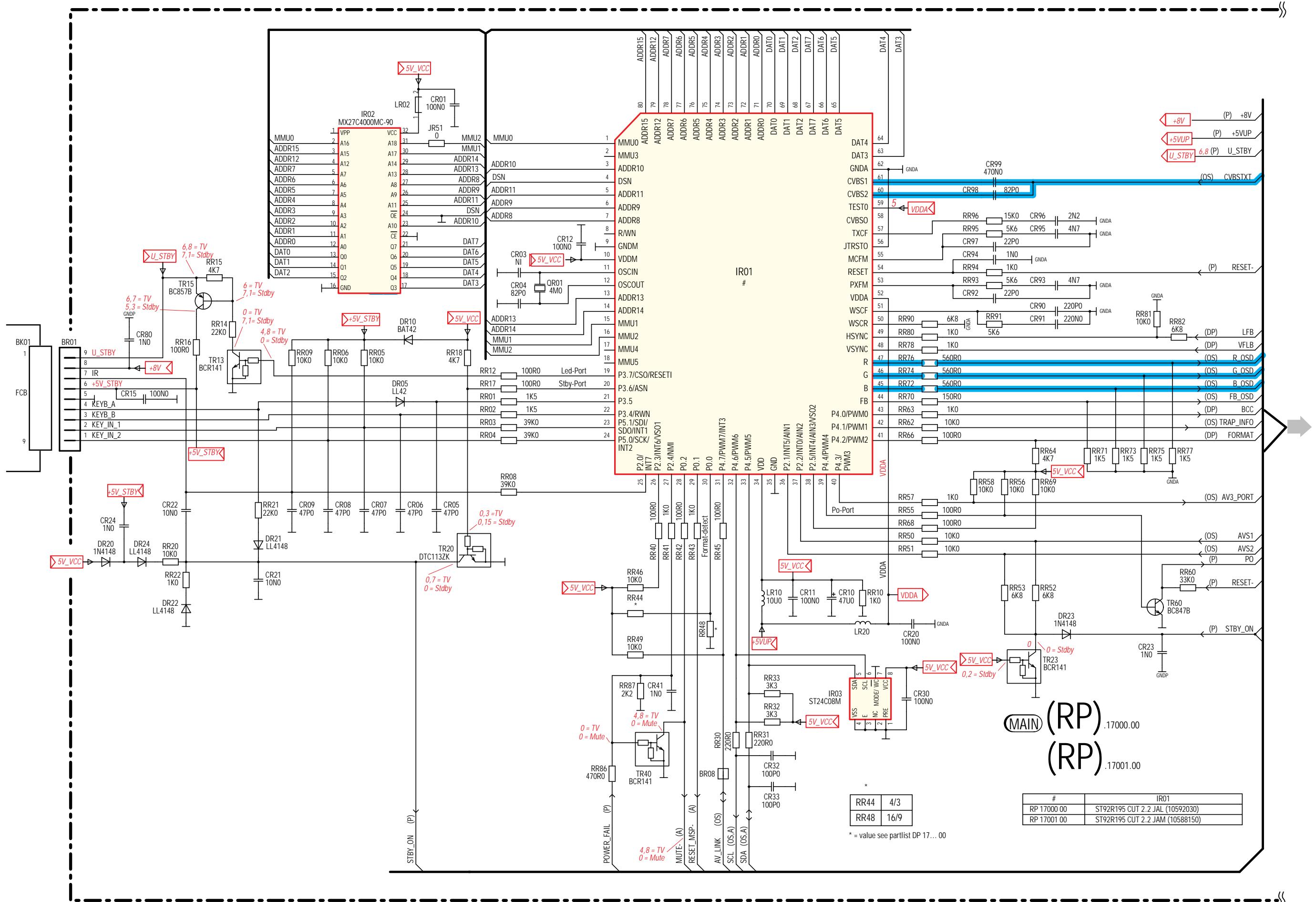
En ese caso, el fabricante cesa de ser responsable.

TV ASY A80AEJ15X01 (A) 00	TV ASY A51EFS83X191 03	TV ASY A59EGD048X30 19
Tube 4/3 33", MP	Tube 4/3 21" OT	Tube 4/3 25", SF, 29" SF
10575830 TV PSD CT 17062 26	10555770 TV PSD CT 17035 26	10515520 TV PSD CT 17071 26
CL21 16N2F +3.5% -3.5% 1K6V	CL21 8N3F +3.5% -3.5% 1K6V	CL21 16N2F +3.5% -3.5% 1K6V
CL22 30NOF +5% -5% 400.0V	CL22 33NOF +5% -5% 1K0V	CL22 30NOF +5% -5% 400.0V
CL24 560NOF +5% -5% 250.0V	CL24 440NOF +5% -5% 250.0V	CL24 510NOF +5% -5% 250.0V
CL41 100POF +10% -10% 50.0V	CL41 1NOF +10% -10% 50.0V	CL41 100POF +10% -10% 50.0V
CL48 10NOF +10% 63.0V	CL48 RGP10M	CL48 10NOF +10% 63.0V
DL48 D-SLP BAV103 200.0V	DL51 BF423	DL48 D-SLP BAV103 200.0V
DL71 D-ZENER BZX55C30 30V 500MIOW	DL52 SH2641	DL71 D-ZENER BZX55C24 24V 500MIOW
JL60 WIREBARE 22	DL53 100NO	JL60 WIREBARE 22
JL80 0 OHM +0% 100MIOW	DL54 10K0	JL80 0 OHM +0% 100MIOW
LB02 LF 18UOH +4% -4%	DL55 220K0	LB02 LF 18UOH +4% -4%
LL05 TF-DST TDS29 TBD 11	CL55 330PO	LL05 TF-DST TDS29 TBD 13
LL22 LF 650UOH +5% -5% R 2873 A0 00	CL56 BF422	LL22 LF 650UOH +5% -5%
LL26 LL 26U5H +10%	RL57 1K0	LL26 LL 26U5H +10%
RF05 1R21 OHM +1% 700MIOW	RL58 47K0	RF05 1R0 OHM +1% 700MIOW
RL02 6K04 OHM +1% 100MIOW	RL59 10K0	RL02 6K8 OHM +5% 100MIOW
RL03 4K75 OHM +1% 100MIOW	RL60 10K0	RL03 4K75 OHM +1% 100MIOW
RL04 4K75 OHM +1% 100MIOW	RL61 10K0	RL04 4K75 OHM +1% 100MIOW
RL05 4K75 OHM +1% 100MIOW	RL62 10K0	RL05 4K75 OHM +1% 100MIOW
RL06 6K81 OHM +1% 100MIOW	RL63 10K0	RL06 6K81 OHM +1% 100MIOW
RL07 13K0 OHM +5% 100MIOW	RL64 10K0	RL07 13K0 OHM +5% 100MIOW
RL45 150K0 OHM +5% 100MIOW	RL65 10K0	RL08 150K0 OHM +5% 100MIOW
RL48 76K8 OHM +1% 100MIOW	RL66 10K0	RL09 76K8 OHM +1% 100MIOW
RL49 560K0 OHM +5% 100MIOW	RL67 10K0	RL10 560K0 OHM +5% 100MIOW
RL65 RCF 4K7 OHM +5% 250MIOW	RL68 10K0	RL11 560K0 OHM +5% 250MIOW
RV20 RMF 33K2 OHM +1% 250MIOW	RL69 10K0	RL12 560K0 OHM +5% 250MIOW
ZL13 PROTEC MOD MP63 630MIO A 65.0V	RL70 10K0	RL13 PROTEC MOD MP63 630MIO A 65.0V

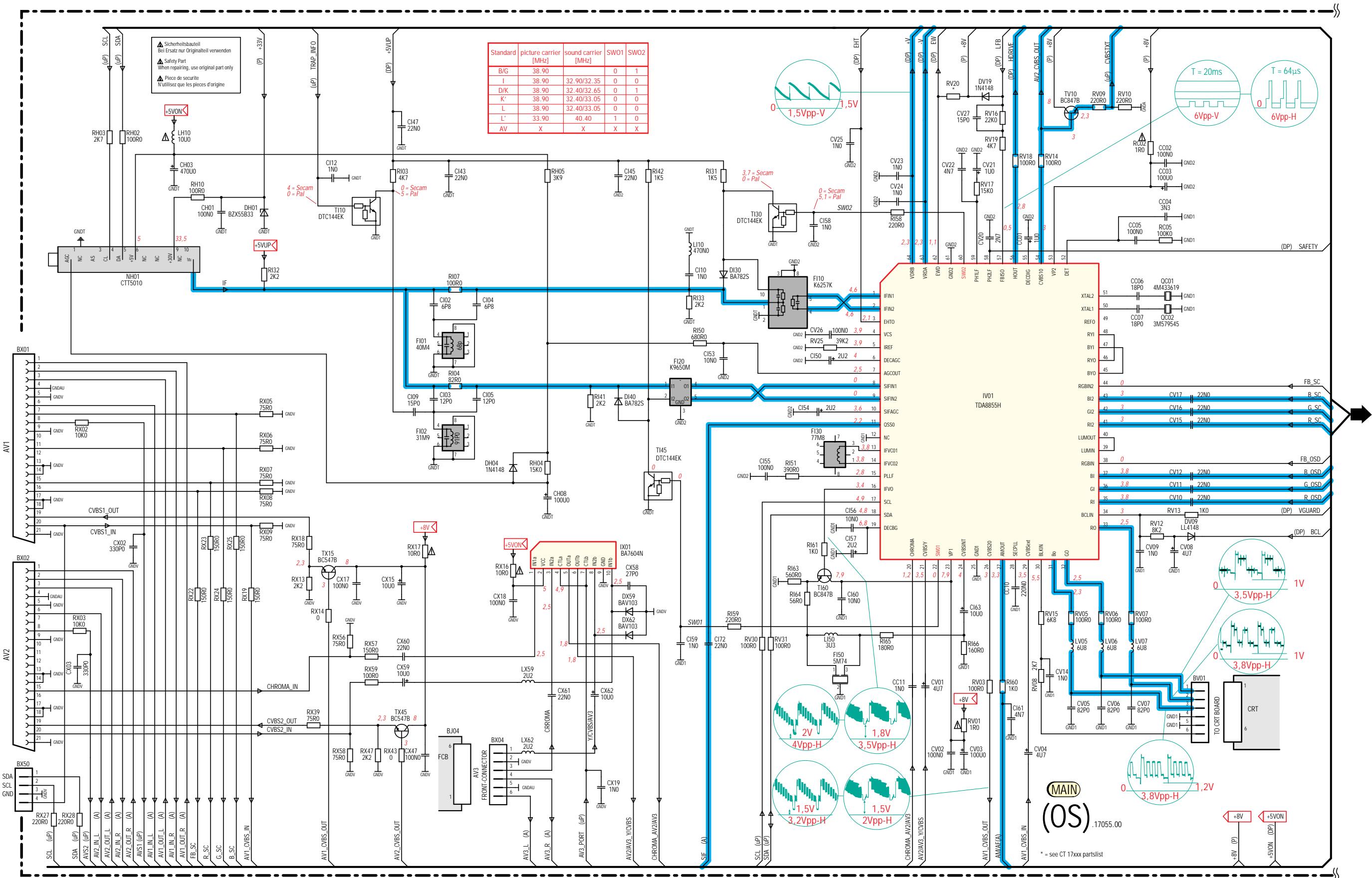
TV ASY A51EFS83X191 03	TV ASY A68EGD038X30 (A) 68 00	TV ASY W76EGV023X015 (A) 00
Tube 4/3 21" OT	Tube 4/3 25", SF, 29" SF	Tube 16/9 24", 28", 32", SF / vectorgun
10555770 TV PSD CT 17035 26	10515520 TV PSD CT 17071 26	10515530 TV PSD CT 17083 38
CL21 8N3F +3.5% -3.5% 1K6V	CL21 16N2F +3.5% -3.5% 1K6V	CL21 15N5F +3.5% -3.5% 1K6V
CL22 33NOF +5% -5% 1K0V	CL22 30NOF +5% -5% 400.0V	CL22 27NOF +5% -5% 400.0V
CL24 440NOF +5% -5% 250.0V	CL24 510NOF +5% -5% 250.0V	CL24 440NOF +5% -5% 250.0V
CL41 1NOF +10% -10% 50.0V	CL41 100POF +10% -10% 50.0V	CL41 100POF +10% -10% 50.0V
CL48 10NOF +10% 63.0V	CL48 10NOF +10% 63.0V	CL48 10NOF +5% 63.0V
DL48 D-SLP BAV103 200.0V	DL48 D-SLP BAV103 200.0V	DL48 D-SLP BAV103 200.0V
DL71 D-ZENER BZX55C30 30V 500MIOW	DL71 D-ZENER BZX55C24 24V 500MIOW	DL71 D-ZENER BZX55C24 24V 500MIOW
JL60 WIREBARE 22	JL60 WIREBARE 22	JL60 WIREBARE 22
JL80 0 OHM +0% 100MIOW	JL80 0 OHM +0% 100MIOW	JL80 0 OHM +0% 100MIOW
LB02 LF 18UOH +7% -7%	LB02 LF 18UOH +4% -4%	LB02 LF 32UOH +4% -4%
LL05 TF-DST M30FBC3 10555640 3087 A0	LL05 TF-DST TDS29 TBD 11	LL05 TF-DST TDS29 TBD 13
LL22 LF 650UOH +5% -5% R 2873 A0 00	LL22 LF 650UOH +5% -5%	LL22 LF 650UOH +5% -5%
LL26 LL 26U5H 10%	LL26 LL 26U5H +10%	LL26 LL 30U5H 2519 A0
RF05 1R21 OHM +1% 700MIOW	RF05 1R0 OHM +1% 700MIOW	RF05 1R21 OHM +1% 700MIOW
RL02 6K04 OHM +1% 100MIOW	RL02 6K8 OHM +5% 100MIOW	RL02 4K99 OHM +1% 100MIOW
RL03 4K75 OHM +1% 100MIOW	RL03 4K75 OHM +1% 100MIOW	RL03 6K49 OHM +1% 100MIOW
RL04 4K75 OHM +1% 100MIOW	RL04 4K75 OHM +1% 100MIOW	RL04 6K49 OHM +1% 100MIOW
RL05 4K75 OHM +1% 100MIOW	RL05 4K75 OHM +1% 100MIOW	RL05 6K49 OHM +1% 100MIOW
RL06 6K81 OHM +1% 100MIOW	RL06 6K81 OHM +1% 100MIOW	RL06 2K37 OHM +1% 100MIOW
RL07 13K0 OHM +5% 100MIOW	RL07 13K0 OHM +5% 100MIOW	RL07 13K0 OHM +5% 100MIOW
RL45 150K0 OHM +5% 100MIOW	RL45 150K0 OHM +5% 100MIOW	RL45 180K0 OHM +5% 100MIOW
RL48 76K8 OHM +1% 100MIOW	RL48 76K8 OHM +1% 100MIOW	RL48 100K0 OHM +5% 100MIOW
RL49 560K0 OHM +5% 100MIOW	RL49 560K0 OHM +5% 100MIOW	RL49 300K0 OHM +5% 100MIOW
RL65 RCF 4K7 OHM +5% 250MIOW	RL65 RCF 4K7 OHM +5% 250MIOW	RL65 4K7 OHM +5% 250MIOW
RV20 RMF 33K2 OHM +1% 250MIOW	RV20 RMF 33K2 OHM +1% 250MIOW	RV20 100K0 OHM +1% 250MIOW

TV ASY W76EGV023X015 56 01	TV ASY W66EGV023X015 66 00	TV ASY W56EGV023X015 56 01
Tube 16/9 24", 28", 32", SF / vectorgun	Tube 4/3 25", 28", MP / Vectorgun	Tube 4/3 33", MP
10515530 TV PSD CT 17083 38	10515520 TV PSD CT 17071 26	10515520 TV PSD CT 17071 26
CL21 15N5F +3.5% -3.5% 1K6V	CL21 16N2F +3.5% -3.5% 1K6V	CL21 15N5F +3.5% -3.5% 1K6V
CL22 27NOF +5% -5% 400.0V	CL22 30NOF +5% -5% 400.0V	CL22 27NOF +5% -5% 400.0V
CL24 440NOF +5% -5% 250.0V	CL24 510NOF +5% -5% 250.0V	CL24 440NOF +5% -5% 250.0V
CL41 100POF +10% -10% 50.0V	CL41 100POF +10% -10% 50.0V	CL41 100POF +10% -10% 50.0V
CL48 100NOF +5% 63.0V	CL48 100NOF +5% 63.0V	CL48 100NOF +5% 63.0V
DL48 D-SLP BAV103 200.0V	DL48 D-SLP BAV103 200.0V	DL48 D-SLP BAV103 200.0V
DL71 D-ZENER BZX55C30 30V 500MIOW	DL71 D-ZENER BZX55C24 24V 500MIOW	DL71 D-ZENER BZX55C24 24V 500MIOW
JL60 WIREBARE 22	JL60 WIREBARE 22	JL60 WIREBARE 22
JL80 0 OHM +0% 100MIOW	JL80 0 OHM +0% 100MIOW	JL

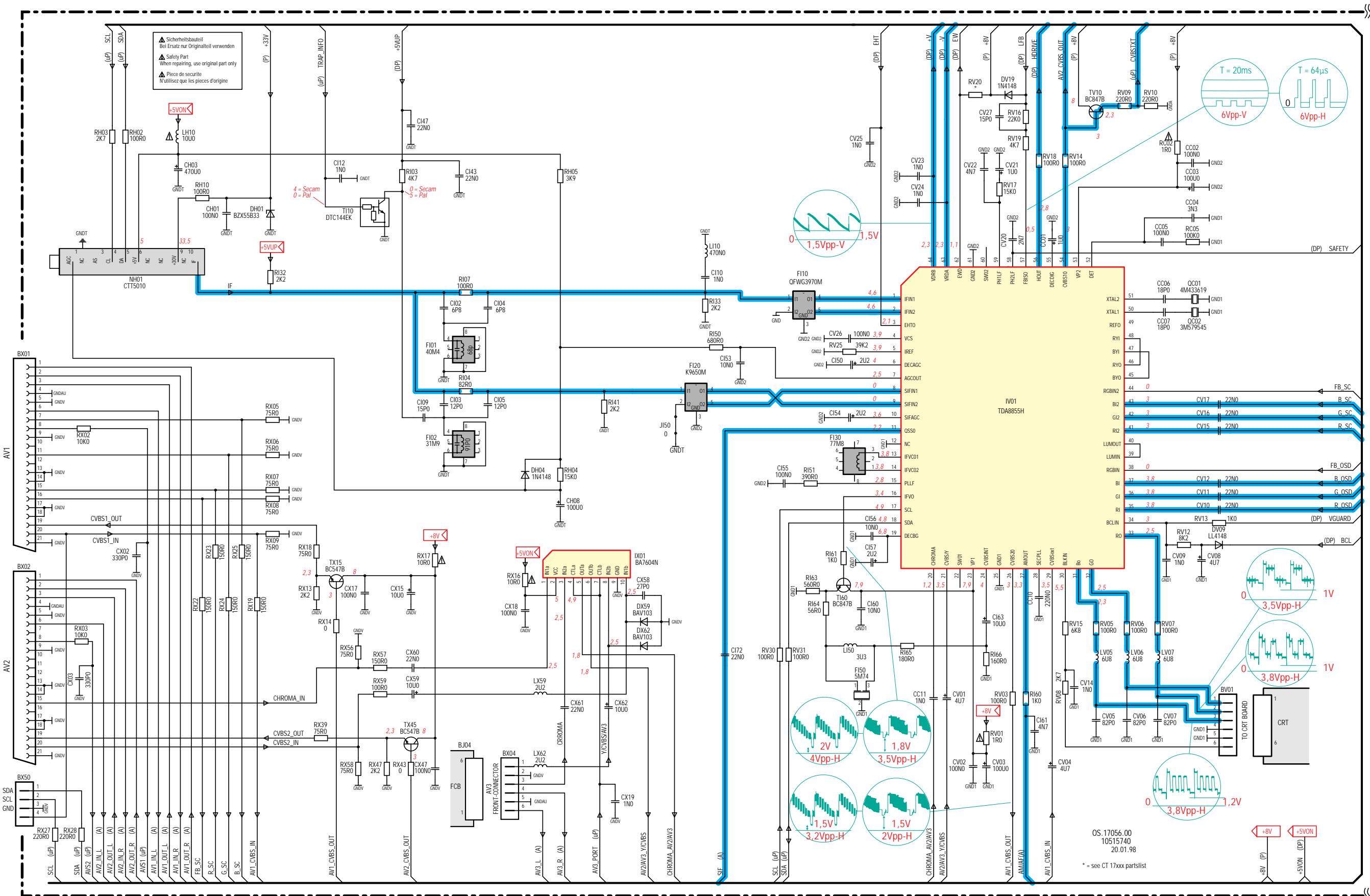
CONTROL MICROPROCESSOR - MICROPROCESSEUR DE COMMANDE - MIKROPROZESSOR - MICROPROCESSORE DEI COMANDI - MICROPROCESADOR DE LOS MANDOS



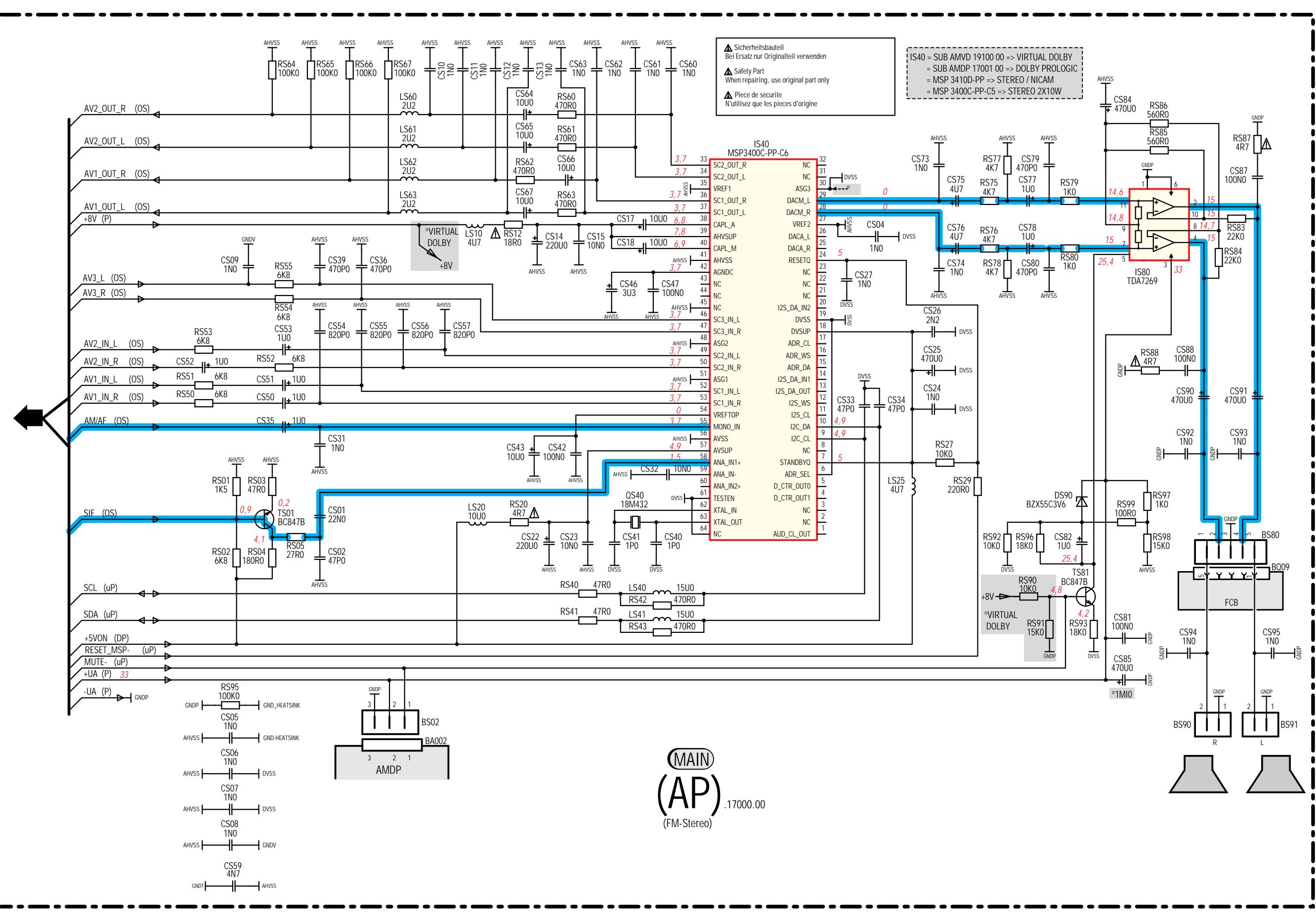
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO
SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONNECTOR / TRATAMENTO VIDEO



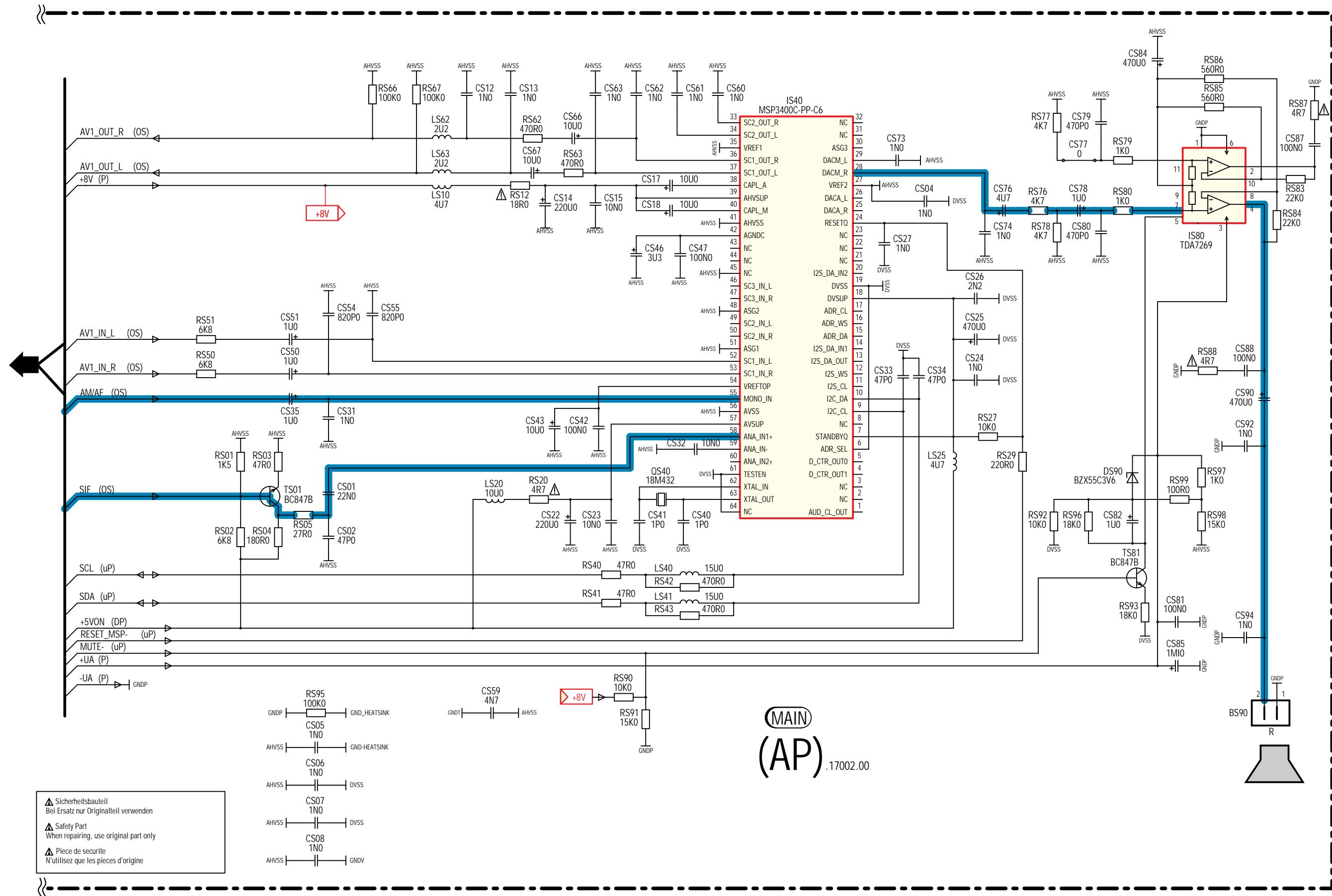
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PER TELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO
 SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONNECTOR/TRATAMENTO VIDEO



AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE
 ESQUEMA DEL AMPLIFICADOR (STEREO)



AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERABEITUNG - SCHEMA DELL' AMPLIFICATORE -
ESQUEMA DEL AMPLIFICADOR
(MONO)



POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN

(5) : standby

Note :
During measurements in the power supply unit

- Use the primary power unit ground (PGND).

Attention :

Mesure dans le bloc alimentation
- Utiliser la masse du bloc alimentation (PGND).

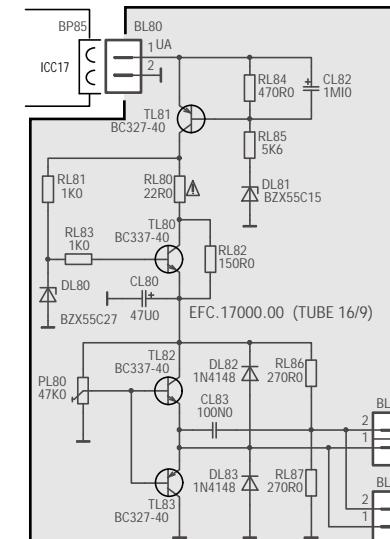
Achtung :
Bei Messungen im Primärnetzteil
- Primärnetzteilmasse verwenden (PGND).

Attenzione :
misura nell'alimentatore primario
- usare massa alimentazione primario (PGND).

Cuidado :
Medida en el bloque de alimentacion
- Utilizar la masa del bloque de alimentacion (PGND).

Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello chassis collegata alla rete.
Parte del chassis conectada a la red.

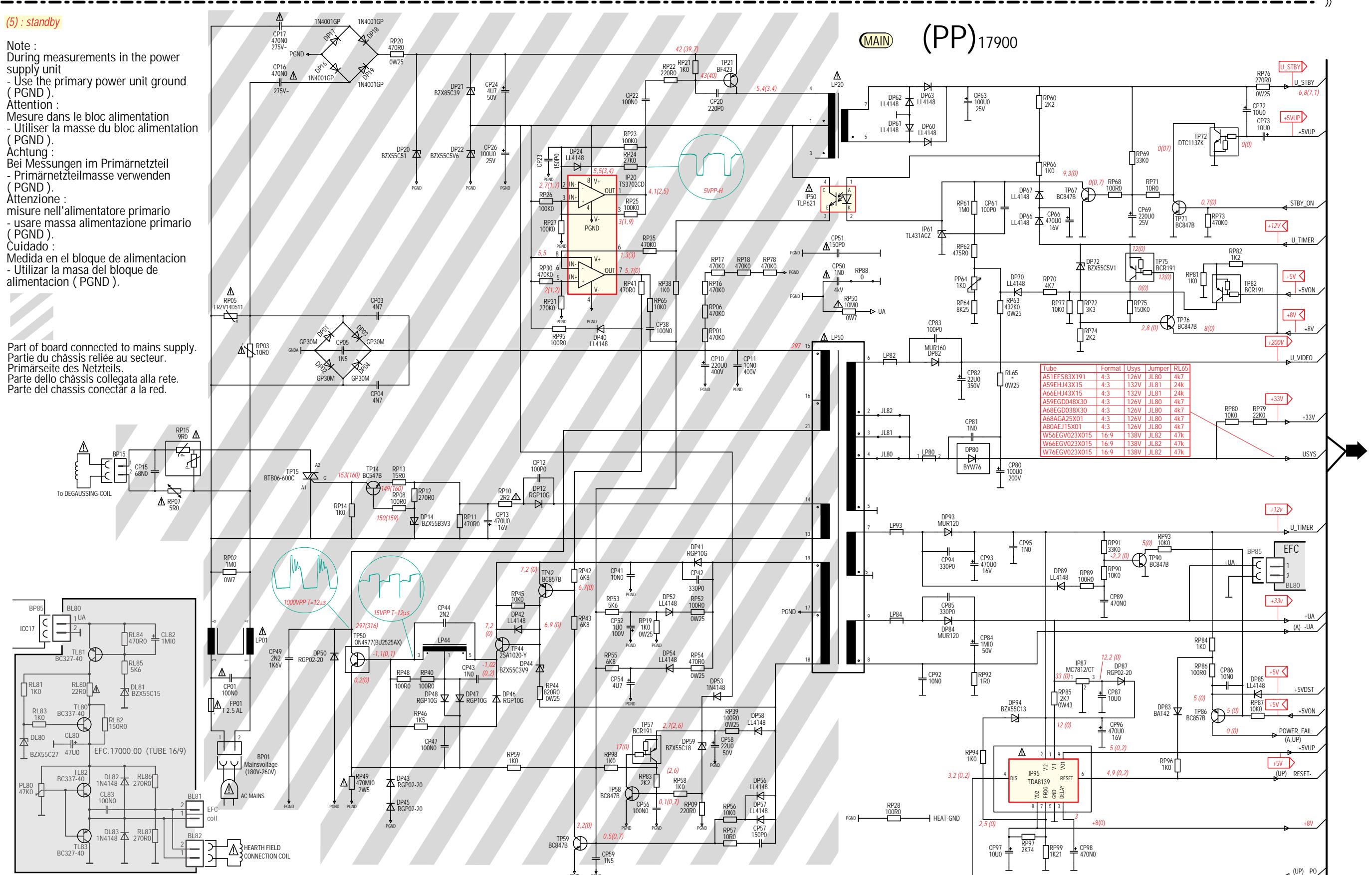
To DEGAUSSING-COIL



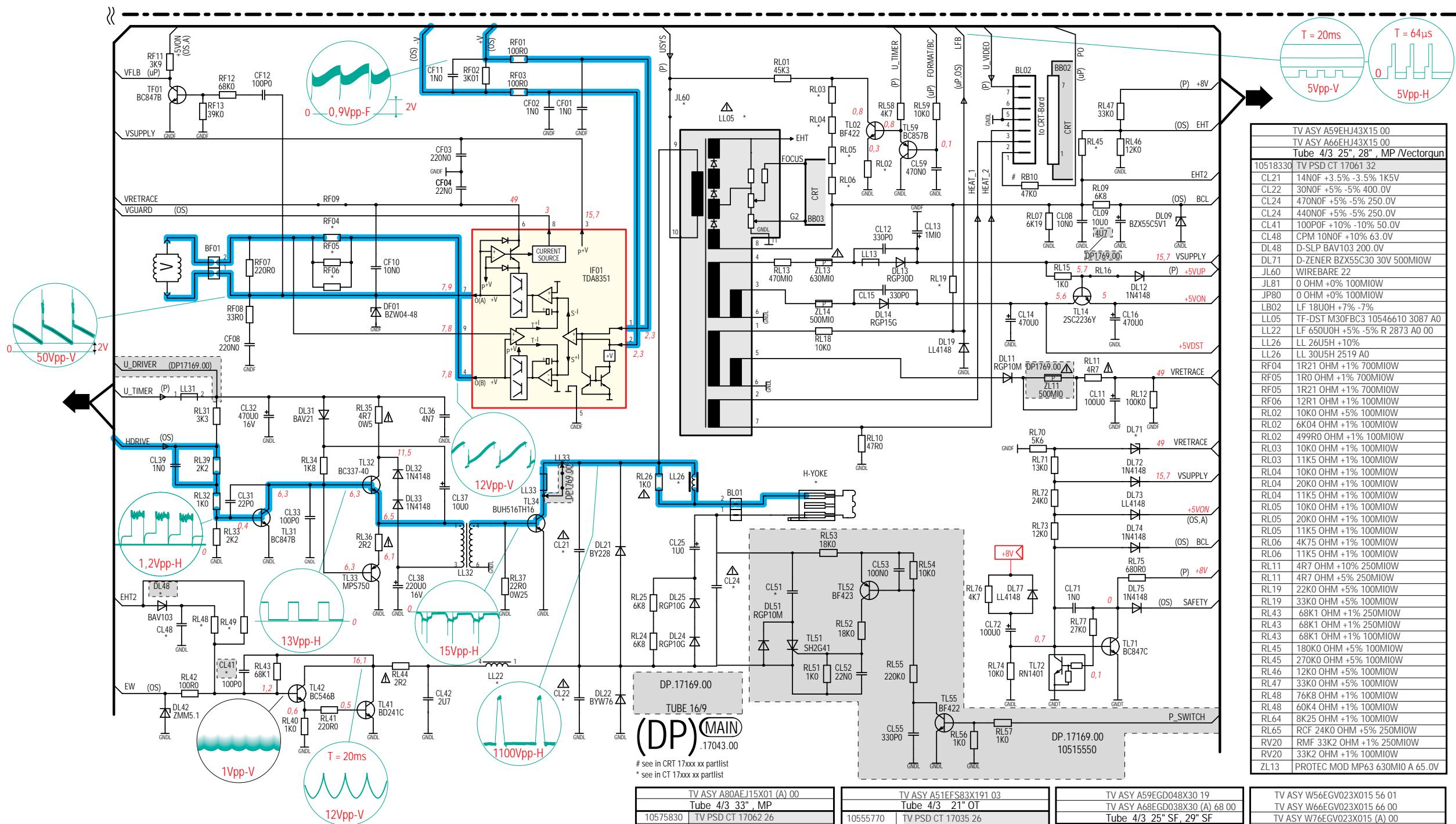
Use isolating mains transformer - Utiliser un transformateur isolateur du secteur - Einen Trenntrafo verwenden
Utilizar un transformador aislador de red - Utilizzare un trasformatore per isolarlo dalla rete

MAIN

(PP)17900



SCANNING - BALAYAGE - ABLENKUNG - BARRIDO - SCANSIONE



⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.

Dans ce cas, la responsabilité du fabricant n'est plus engagée.

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La substitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato.

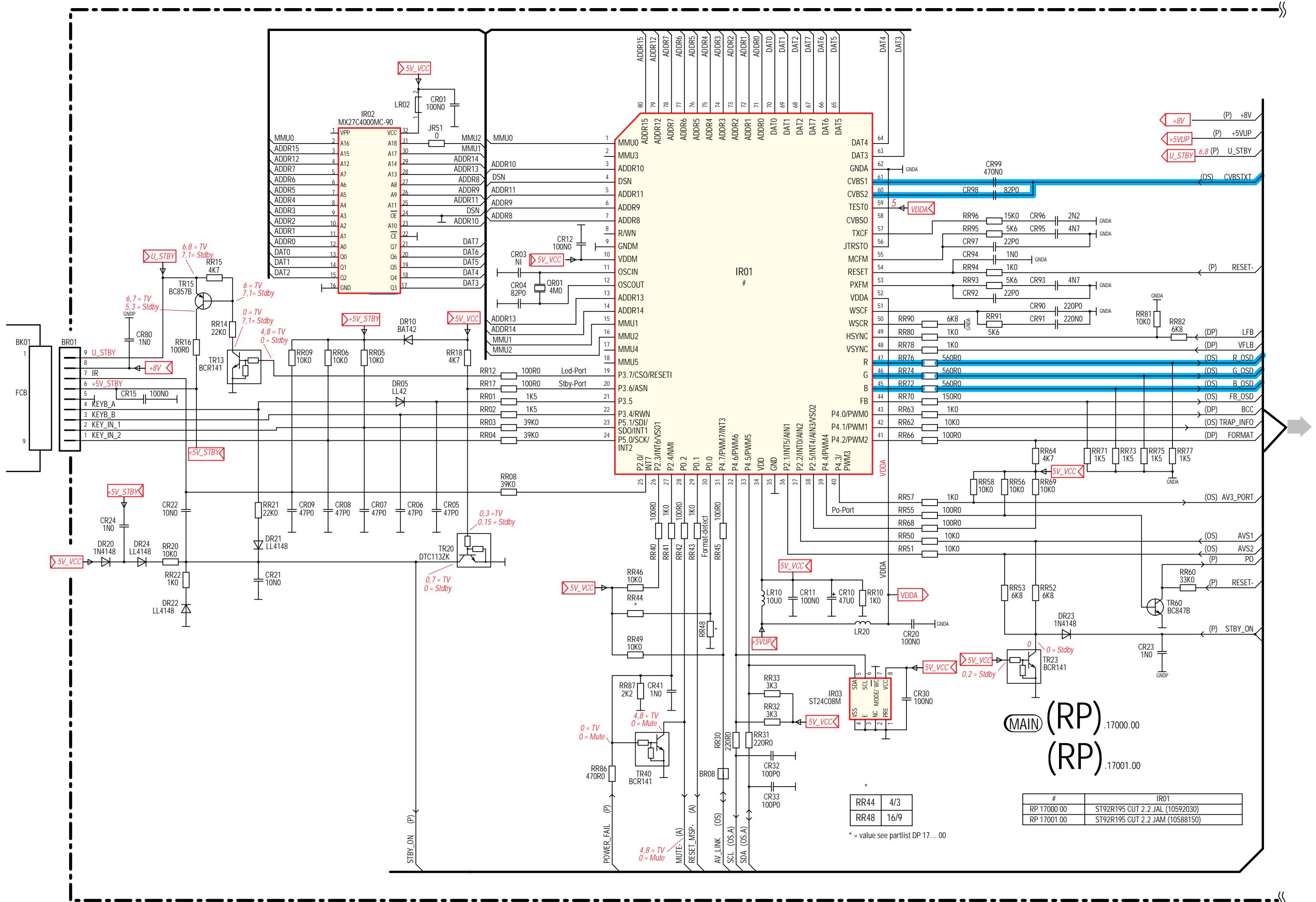
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TV ASY A80AEJ15X01 (A) 00	TV ASY A51EFS83X191 03	TV ASY A59EGD048X30 19
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CL21 16N2F +3.5% -3.5% 1K6V	CL21 8N3F +3.5% -3.5% 1K6V	CL21 16N2F +3.5% -3.5% 1K6V
CL22 30NOF +5% -5% 400.0V	CL22 33NOF +5% -5% 1K0V	CL22 30NOF +5% -5% 400.0V
CL24 560NOF +5% -5% 250.0V	CL24 440NOF +5% -5% 250.0V	CL24 510NOF +5% -5% 250.0V
CL41 100POF +10% -10% 50.0V	CL41 1NOF +10% -10% 50.0V	CL41 100POF +10% -10% 50.0V
CL48 10NOF +10% 63.0V	CL48 RGP10M	CL48 10NOF +10% 63.0V
DL48 D-SLP BAV103 200.0V	DL51 BF423	DL48 D-SLP BAV103 200.0V
DL71 D-ZENER BZX55C30 30V 500MIOW	DL52 SH2641	DL71 D-ZENER BZX55C24 24V 500MIOW
JL60 WIREBARE 22	DL53 100NO	JL60 WIREBARE 22
JL80 0 OHM +0% 100MIOW	DL54 10K0	JL80 0 OHM +0% 100MIOW
LB02 LF 32UOH +4% -4%	DL55 220K0	LB02 LF 32UOH +4% -4%
LL05 TF-DST TDS29 TBD 11	CL55 330PO	LL05 TF-DST TDS29 TBD 13
LL22 LF 650UOH +5% -5% R 2873 A0 00	CL56 BF422	LL22 LF 650UOH +5% -5%
LL26 LL 26U5H +10%	RL57 1K0	LL26 LL 26U5H +10%
RF05 1R21 OHM +1% 700MIOW	RL58 4K7	RF05 1R0 OHM +1% 700MIOW
RL02 6K04 OHM +1% 100MIOW	RL59 10K0	RL02 6K8 OHM +5% 100MIOW
RL03 4K75 OHM +1% 100MIOW	RL60 10K0	RL03 4K75 OHM +1% 100MIOW
RL04 4K75 OHM +1% 100MIOW	RL61 10K0	RL04 4K75 OHM +1% 100MIOW
RL05 4K75 OHM +1% 100MIOW	RL62 10K0	RL05 4K75 OHM +1% 100MIOW
RL06 6K81 OHM +1% 100MIOW	RL63 10K0	RL06 6K81 OHM +1% 100MIOW
RL07 13K0 OHM +5% 100MIOW	RL64 10K0	RL07 13K0 OHM +5% 100MIOW
RL45 150K0 OHM +5% 100MIOW	RL65 4K7	RL08 150K0 OHM +5% 100MIOW
RL48 76K8 OHM +1% 100MIOW	RL66 10K0	RL09 76K8 OHM +1% 100MIOW
RL49 560K0 OHM +5% 100MIOW	RL67 10K0	RL10 560K0 OHM +5% 100MIOW
RL65 RCF 4K7 OHM +5% 250MIOW	RL68 10K0	RL11 560K0 OHM +5% 250MIOW
RV20 RMF 33K2 OHM +1% 250MIOW	RL69 10K0	RL12 33K2 OHM +1% 250MIOW
ZL13 PROTEC MOD MP63 630MIO A 65.0V	RL70 5K6	ZL13 PROTEC MOD MP63 630MIO A 65.0V

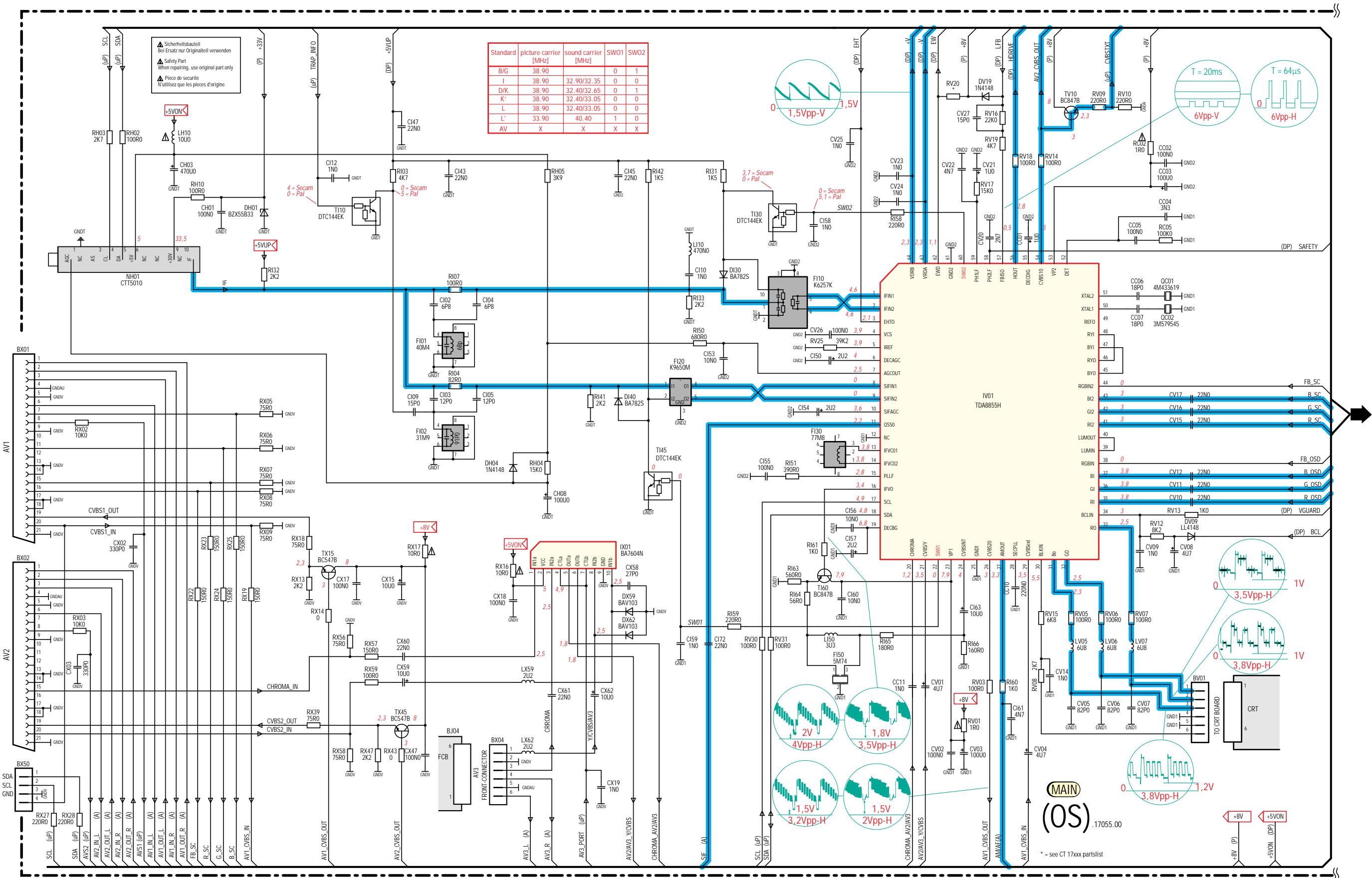
TV ASY A51EFS83X191 03	TV ASY A68EGD038X30 (A) 68 00	TV ASY W76EGV023X015 (A) 00
Tube 4/3 21" OT	Tube 4/3 25", SF, 29" SF	Tube 16/9 24", 28", 32", SF / vectorgun
10555770 TV PSD CT 17035 26	10515520 TV PSD CT 17071 26	10515530 TV PSD CT 17083 38
CL21 8N3F +3.5% -3.5% 1K6V	CL21 16N2F +3.5% -3.5% 1K6V	CL21 15N5F +3.5% -3.5% 1K6V
CL22 33NOF +5% -5% 1K0V	CL22 30NOF +5% -5% 400.0V	CL22 27NOF +5% -5% 400.0V
CL24 440NOF +5% -5% 250.0V	CL24 510NOF +5% -5% 250.0V	CL24 440NOF +5% -5% 250.0V
CL41 1NOF +10% -10% 50.0V	CL41 100POF +10% -10% 50.0V	CL41 100POF +10% -10% 50.0V
CL48 10NOF +10% 63.0V	CL48 10NOF +10% 63.0V	CL48 10NOF +5% 63.0V
DL48 D-SLP BAV103 200.0V	DL48 D-SLP BAV103 200.0V	DL48 D-SLP BAV103 200.0V
DL71 D-ZENER BZX55C30 30V 500MIOW	DL71 D-ZENER BZX55C24 24V 500MIOW	DL71 D-ZENER BZX55C24 24V 500MIOW
JL60 WIREBARE 22	JL60 WIREBARE 22	JL60 WIREBARE 22
JL80 0 OHM +0% 100MIOW	JL80 0 OHM +0% 100MIOW	JL80 0 OHM +0% 100MIOW
LB02 LF 18UOH +7% -7%	LB02 LF 18UOH +7% -7%	LB02 LF 32UOH +4% -4%
LL05 TF-DST M30FBC3 10555640 3087 A0	LL05 TF-DST M30FBC3 10555640 3087 A0	LL05 TF-DST TDS29 TBD 11
LL22 LF 650UOH +5% -5% R 2873 A0 00	LL22 LF 650UOH +5% -5% R 2873 A0 00	LL22 LF 650UOH +5% -5% R 2873 A0 00
LL26 LL 26U5H 10%	LL26 LL 26U5H 10%	LL26 LL 26U5H 10%
RF05 1R5 OHM +1% 700MIOW	RF05 1R0 OHM +1% 700MIOW	RF05 1R21 OHM +1% 700MIOW
RL02 6K04 OHM +1% 100MIOW	RL02 6K04 OHM +1% 100MIOW	RL02 4K99 OHM +1% 100MIOW
RL03 4K75 OHM +1% 100MIOW	RL03 4K75 OHM +1% 100MIOW	RL03 6K49 OHM +1% 100MIOW
RL04 4K75 OHM +1% 100MIOW	RL04 4K75 OHM +1% 100MIOW	RL04 6K49 OHM +1% 100MIOW
RL05 4K75 OHM +1% 100MIOW	RL05 4K75 OHM +1% 100MIOW	RL05 6K49 OHM +1% 100MIOW
RL06 6K81 OHM +1% 100MIOW	RL06 6K81 OHM +1% 100MIOW	RL06 2K37 OHM +1% 100MIOW
RL07 13K0 OHM +5% 100MIOW	RL07 13K0 OHM +5% 100MIOW	RL07 13K0 OHM +5% 100MIOW
RL45 150K0 OHM +5% 100MIOW	RL45 150K0 OHM +5% 100MIOW	RL45 180K0 OHM +5% 100MIOW
RL48 76K8 OHM +1% 100MIOW	RL48 76K8 OHM +1% 100MIOW	RL48 100K0 OHM +5% 100MIOW
RL49 560K0 OHM +5% 100MIOW	RL49 560K0 OHM +5% 100MIOW	RL49 300K0 OHM +5% 100MIOW
RL65 RCF 4K7 OHM +5% 250MIOW	RL65 RCF 4K7 OHM +5% 250MIOW	RL65 4K7 OHM +5% 250MIOW
RV20 RMF 33K2 OHM +1% 250MIOW	RV20 RMF 33K2 OHM +1% 250MIOW	RV20 33K2 OHM +1% 250MIOW

TV ASY W76EGV023X015 56 01	TV ASY W66EGV023X015 66 00	TV ASY W56EGV023X015 56 01
Tube 16/9 24", 28", 32", SF / vectorgun	Tube 4/3 25", 28", MP / Vectorgun	Tube 4/3 33", MP
10515530 TV PSD CT 17083 38	10515520 TV PSD CT 17071 26	10515520 TV PSD CT 17071 26
CL21 15N5F +3.5% -3.5% 1K6V	CL21 16N2F +3.5% -3.5% 1K6V	CL21 15N5F +3.5% -3.5% 1K6V
CL22 27NOF +5% -5% 400.0V	CL22 30NOF +5% -5% 400.0V	CL22 27NOF +5% -5% 400.0V
CL24 440NOF +5% -5% 250.0V	CL24 510NOF +5% -5% 250.0V	CL24 440NOF +5% -5% 250.0V
CL41 100POF +10% -10% 50.0V	CL41 100POF +10% -10% 50.0V	CL41 100POF +10% -10% 50.0V
CL48 100NOF +5% 63.0V	CL48 100NOF +5% 63.0V	CL48 100NOF +5% 63.0V
DL48 D-SLP BAV103 200.0V	DL48 D-SLP BAV103 200.0V	DL48 D-SLP BAV103 200.0V
DL71 D-ZENER BZX55C30 30V 500MIOW	DL71 D-ZENER BZX55C24 24V 500MIOW	DL71 D-ZENER BZX55C24 24V 500MIOW
JL60 WIREBARE 22	JL60 WIREBARE 22	JL60 WIREBARE 22
JL80 0 OHM +0% 100		

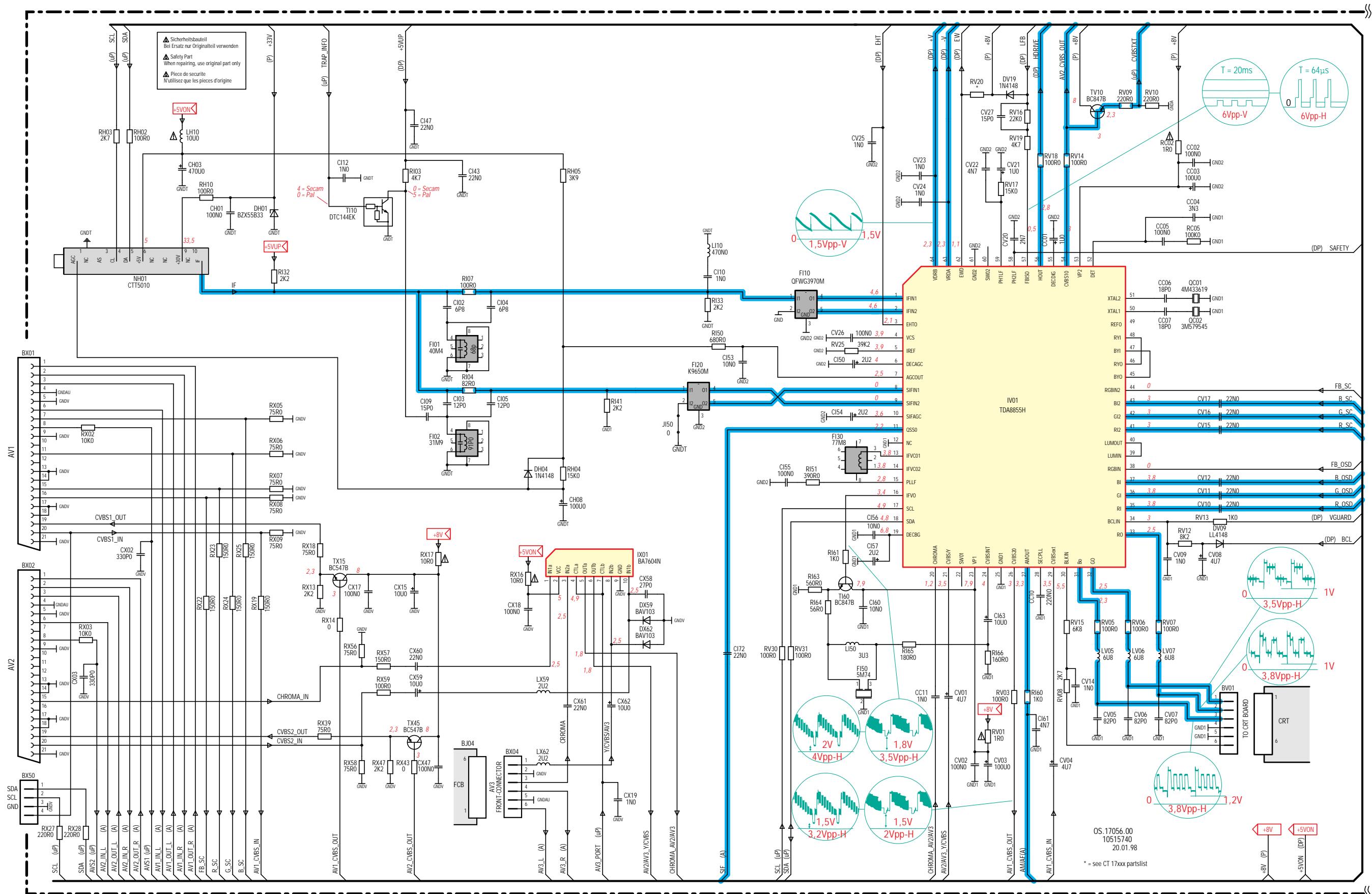
CONTROL MICROPROCESSOR - MICROPROCESSEUR DE COMMANDE - MIKROPROZESSOR - MICROPROCESSORE DEI COMANDI - MICROPROCESADOR DE LOS MANDOS



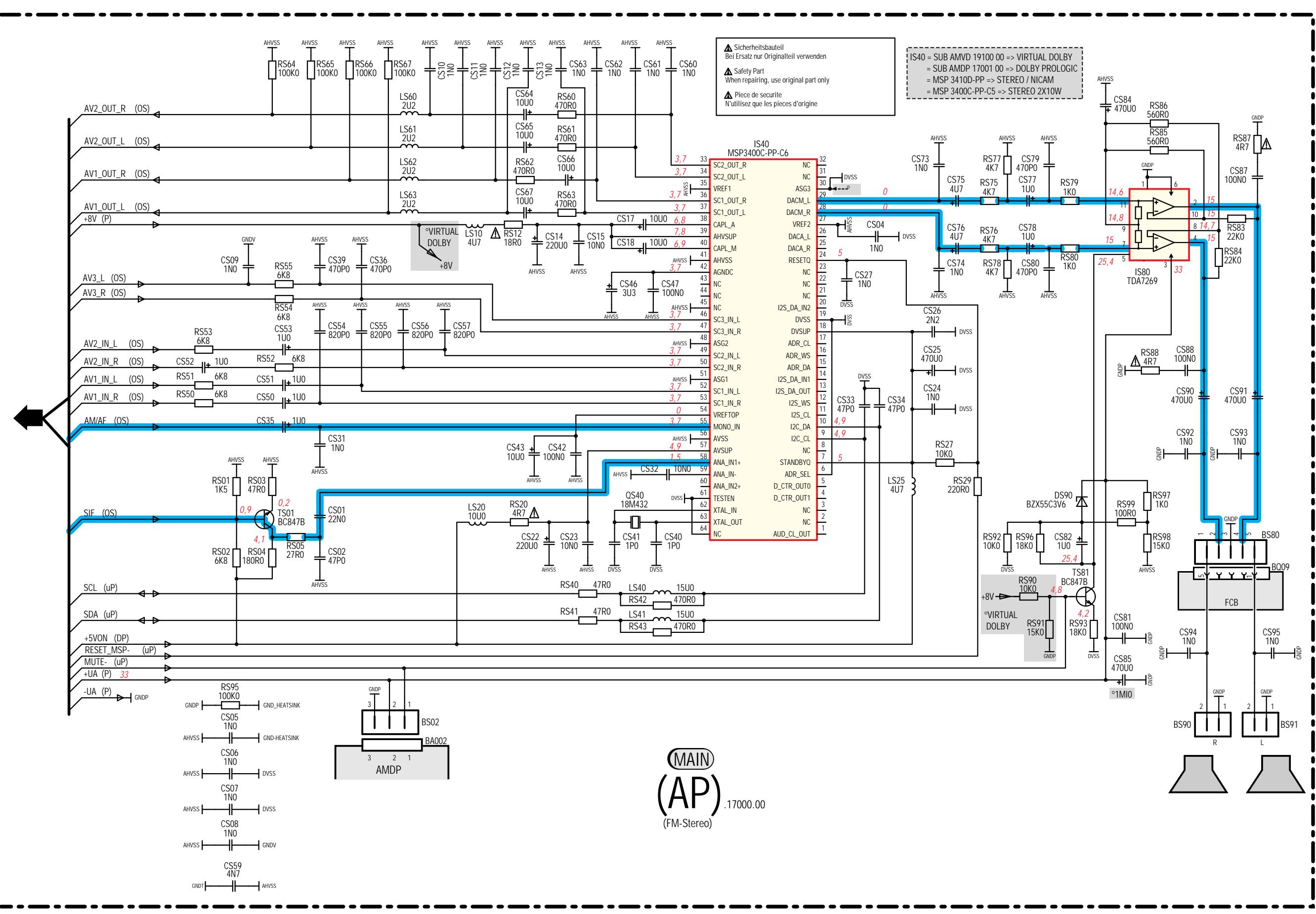
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO
SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONNECTOR / TRATAMENTO VIDEO



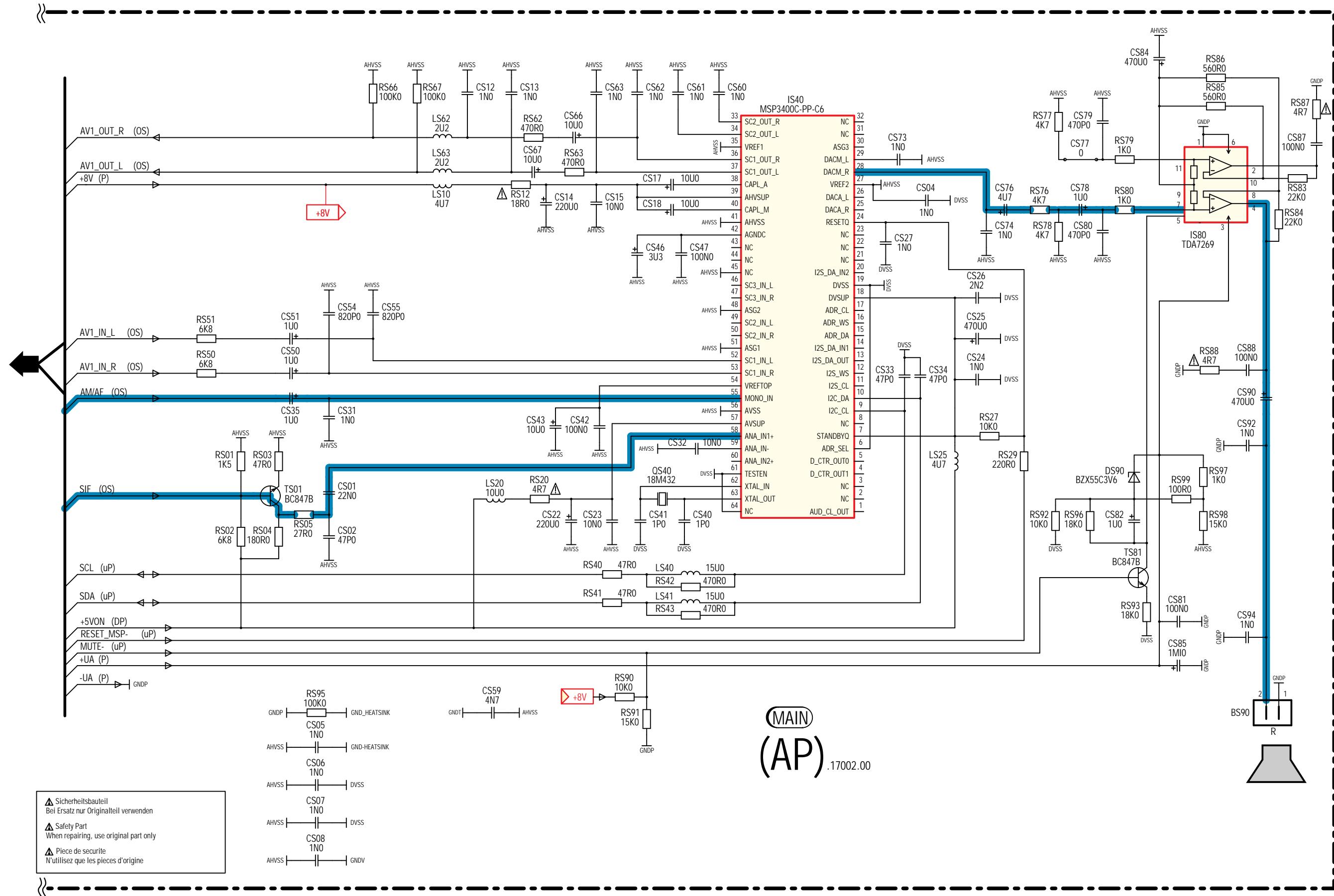
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONNECTOR/TRATAMENTO VIDEO



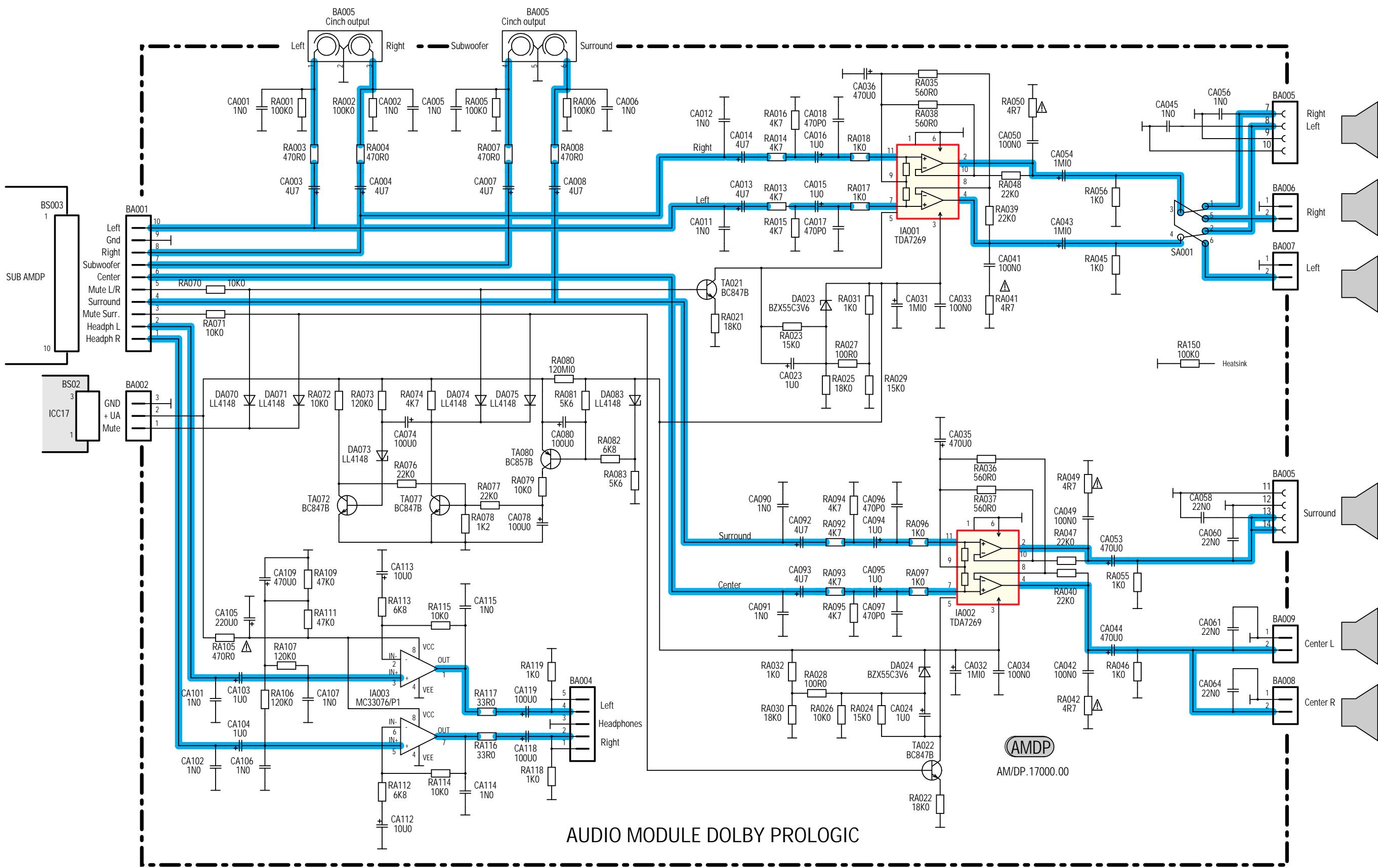
AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE
 ESQUEMA DEL AMPLIFICADOR (STEREO)



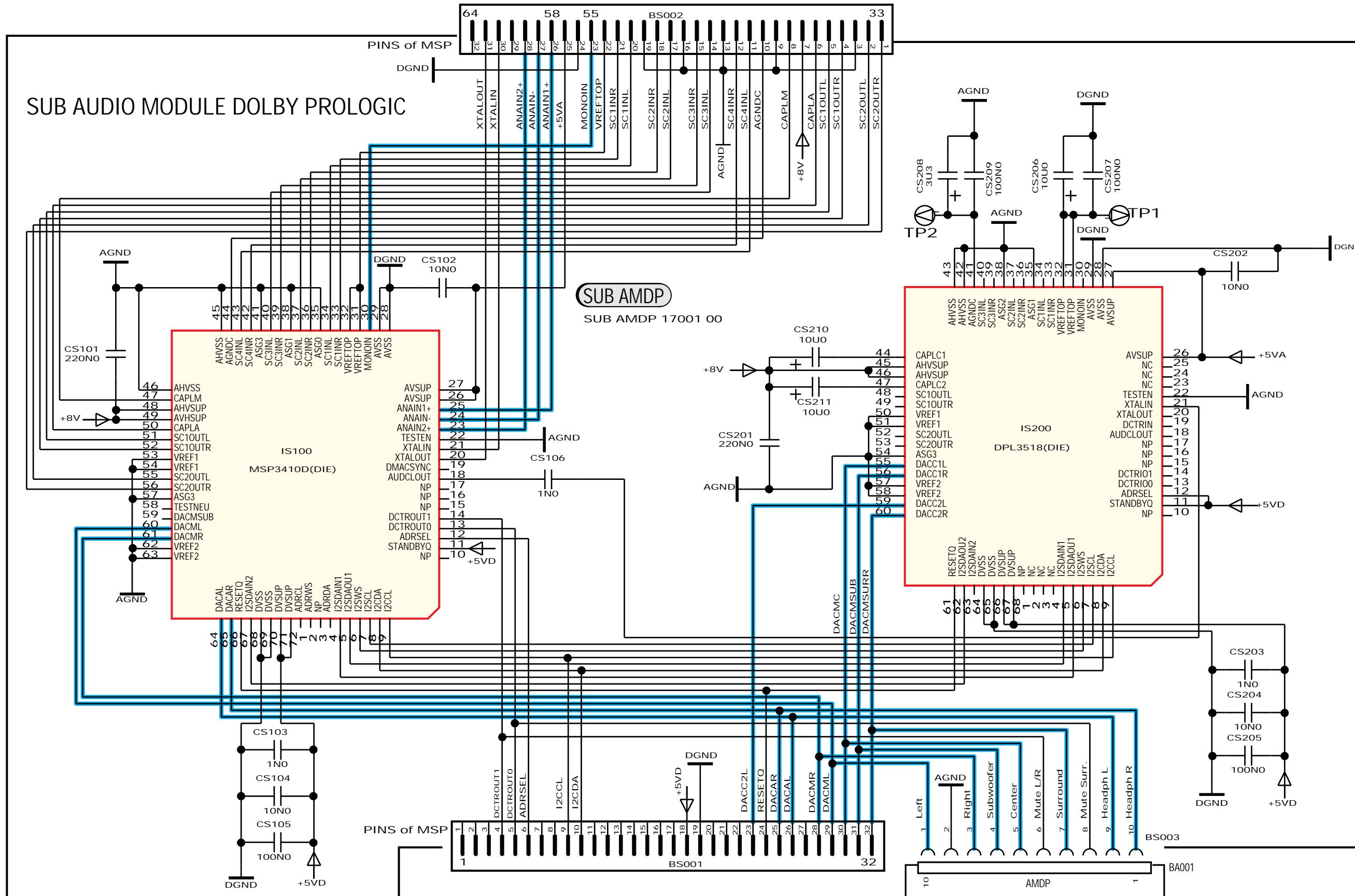
AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERABEITUNG - SCHEMA DELL' AMPLIFICATORE -
ESQUEMA DEL AMPLIFICADOR
(MONO)



**AUDIO SIGNAL MODULE DOLBY PROLOGIC - MODULE AUDIO DOLBY PROLOGIC - DOLBY PROLOGIC VERSTÄRKER - MODULO AUDIO DOLBY PROLOGIC
ESQUEMA DEL MÓDULO AMPLIFICADOR DE AUDIO**



SUB AUDIO SIGNAL MODULE - SUB MODULE AUDIO - AUDIO SIGNAL SUBMODUL - SUB MODULO AUDIO



POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN

(5) : standby

Note :
During measurements in the power supply unit

- Use the primary power unit ground (PGND).

Attention :

Mesure dans le bloc alimentation

- Utiliser la masse du bloc alimentation

(PGND).
Achtung :
Bei Messungen im Primärnetzteil
- Primärnetzteilmasse verwenden
(PGND).

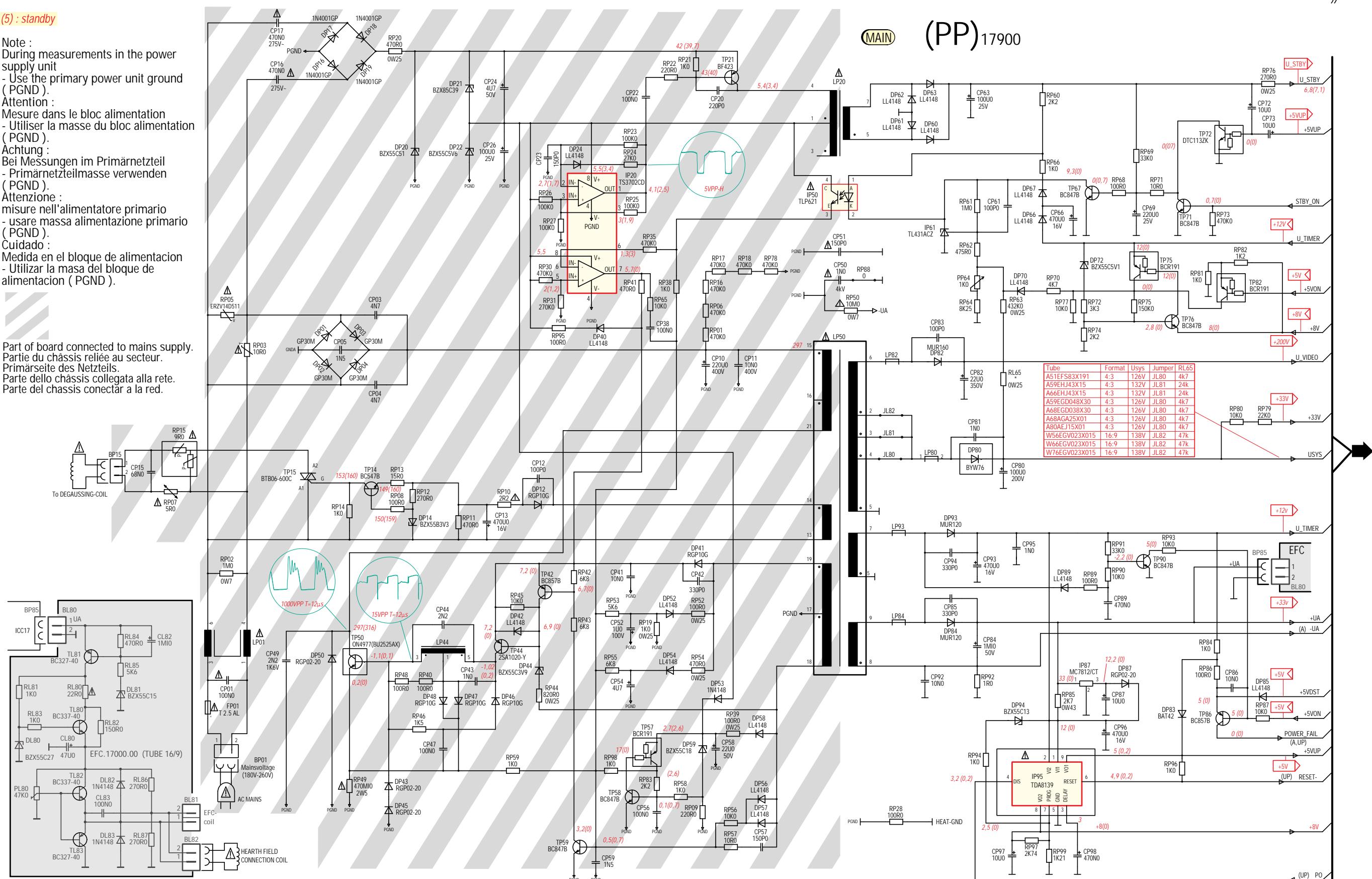
(PGND).
Attenzione :
misure nell'alimentatore primario.

misure nell'alimentazione
- usare massa alimentare (RGND)

(PGND).
Cuidado :
Medida en el bloque de alimentacion
- Utilizar la masa del bloque de
alimentacion (PGND).

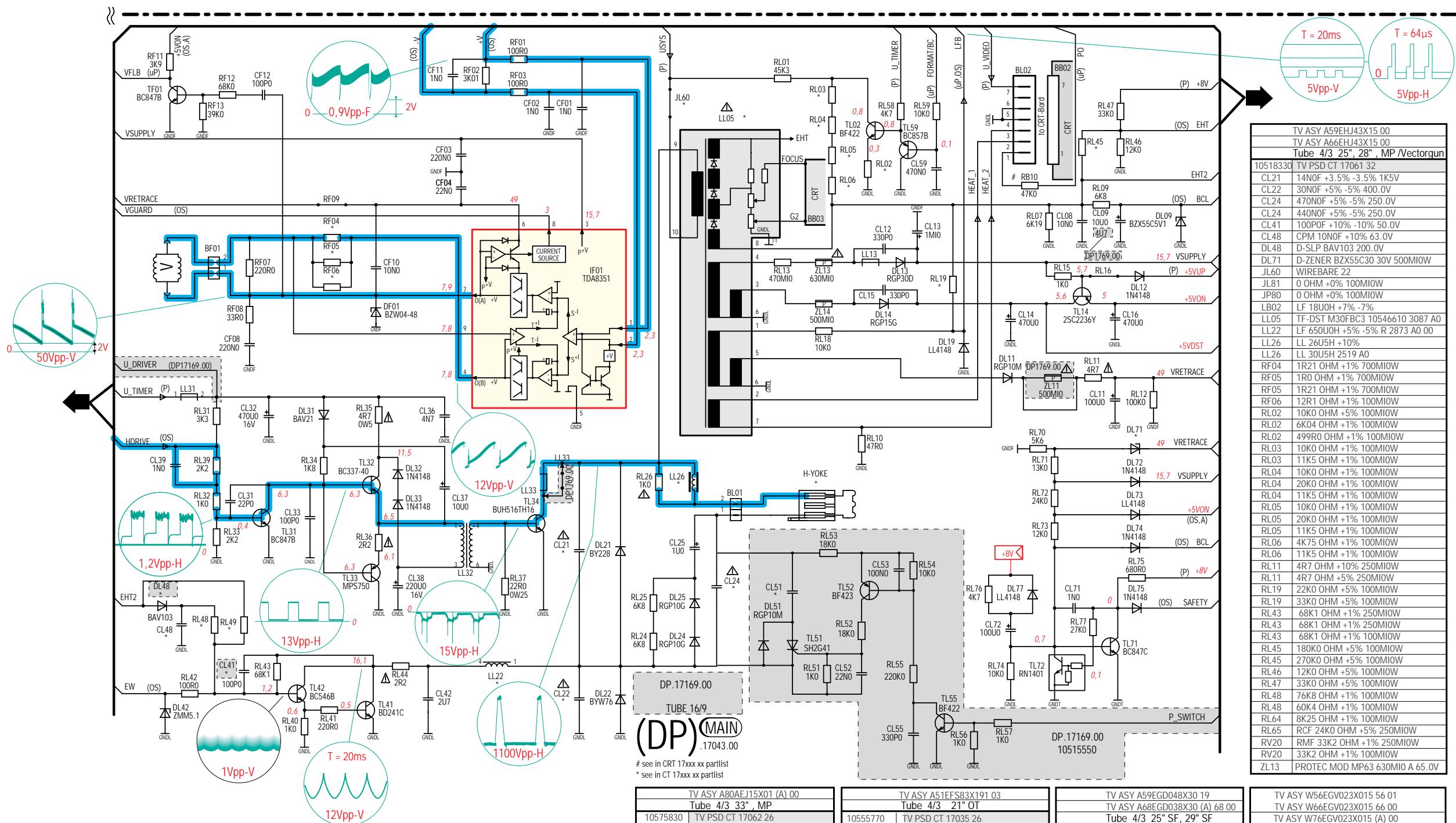
alimentación (PGND).

Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello châssis collegata alla rete.
Parte del châssis conectâr a la red.



Use isolating mains transformer - Utiliser un transformateur isolateur du secteur - Einen Trenntrafo verwenden
Utilizar un transformador aislador de red - Utilizzare un trasformatore per isolare dalla rete

SCANNING - BALAYAGE - ABLENKUNG - BARRIDO - SCANSIONE



⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.

Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) durch nicht normgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (contrassegnati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio.

In tal caso è "esclusa la responsabilità" del costruttore.

La substitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato.

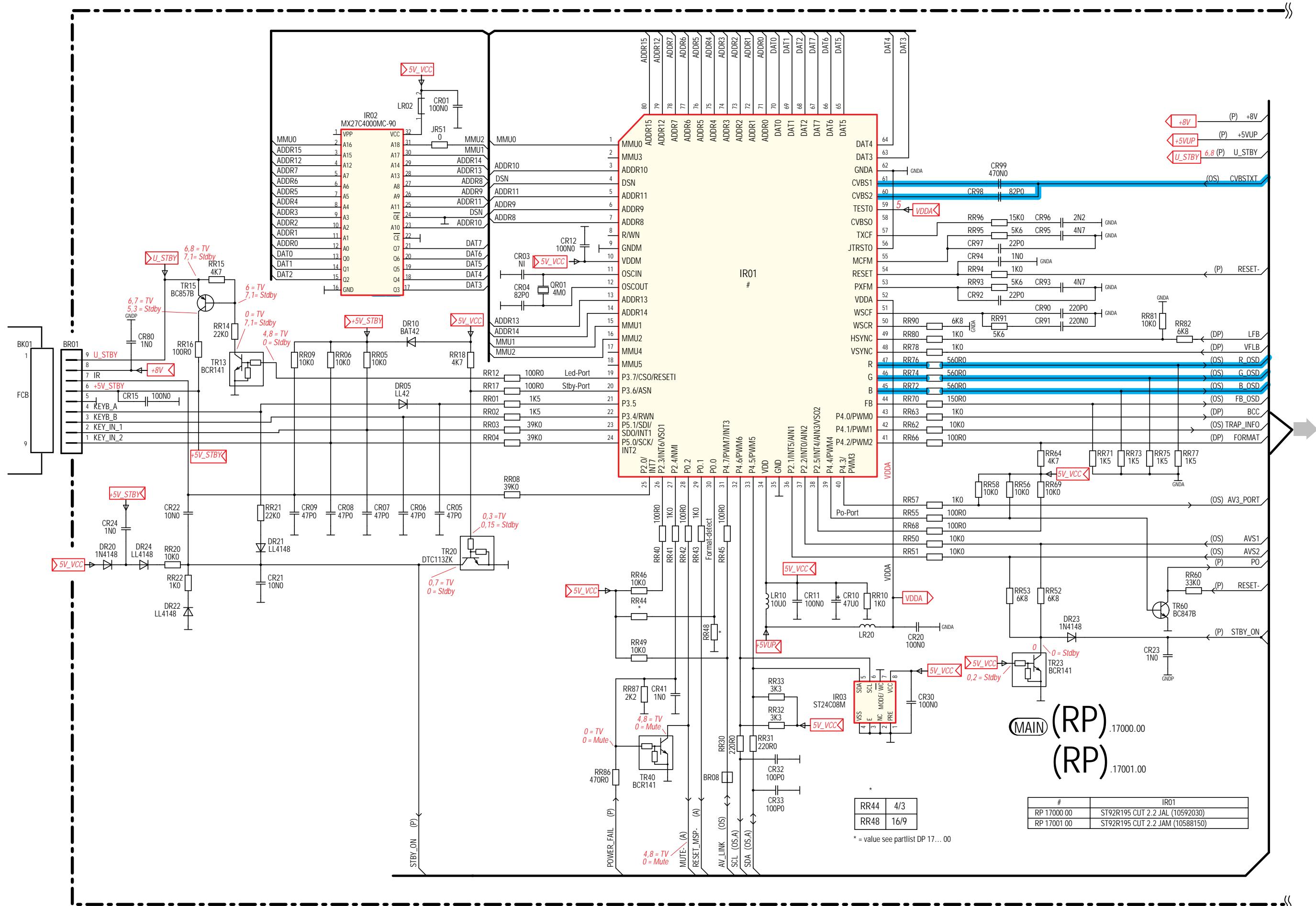
En ese caso, el fabricante cesa de ser responsable.

TV ASY A80AEJ15X01 (A) 00	
Tube 4/3 33", MP	
10575830	TV PSD CT 17062 26
CL21	16N2F +3.5% -3.5% 1K6V
CL22	33NOF +5% -5% 400.0V
CL24	560NOF +5% -5% 250.0V
CL41	100POF +10% -10% 50.0V
CL48	10NOF +10% 63.0V
DL48	D-SLP BAV103 200.0V
DL71	D-ZENER BZX55C30 30V 500MIOW
JL60	WIREBARE 22
JL80	0 OHM +0% 100MIOW
LB02	LF 18UOH +7% -7%
LL05	TF-DST M30FBC3 10555640 3087 A0
LL22	LF 650UOH +5% -5% R 2873 A0 00
LL26	LL 85UOH 2519 A0
RF05	1R5 OHM +1% 700MIOW
RF06	10R0 OHM +1% 100MIOW
RL02	6K04 OHM +1% 100MIOW
RL03	10K0 OHM +1% 100MIOW
RL04	10K0 OHM +1% 100MIOW
RL05	4K75 OHM +1% 100MIOW
RL06	6K81 OHM +1% 100MIOW
RL07	13K0 OHM +5% 100MIOW
RL08	150K0 OHM +5% 100MIOW
RL09	76K8 OHM +1% 100MIOW
RL10	560K0 OHM +5% 100MIOW
RL11	RCF 4K7 OHM +5% 250MIOW
RL12	23K7 OHM +1% 250MIOW
RV20	RMF 33K2 OHM +1% 250MIOW

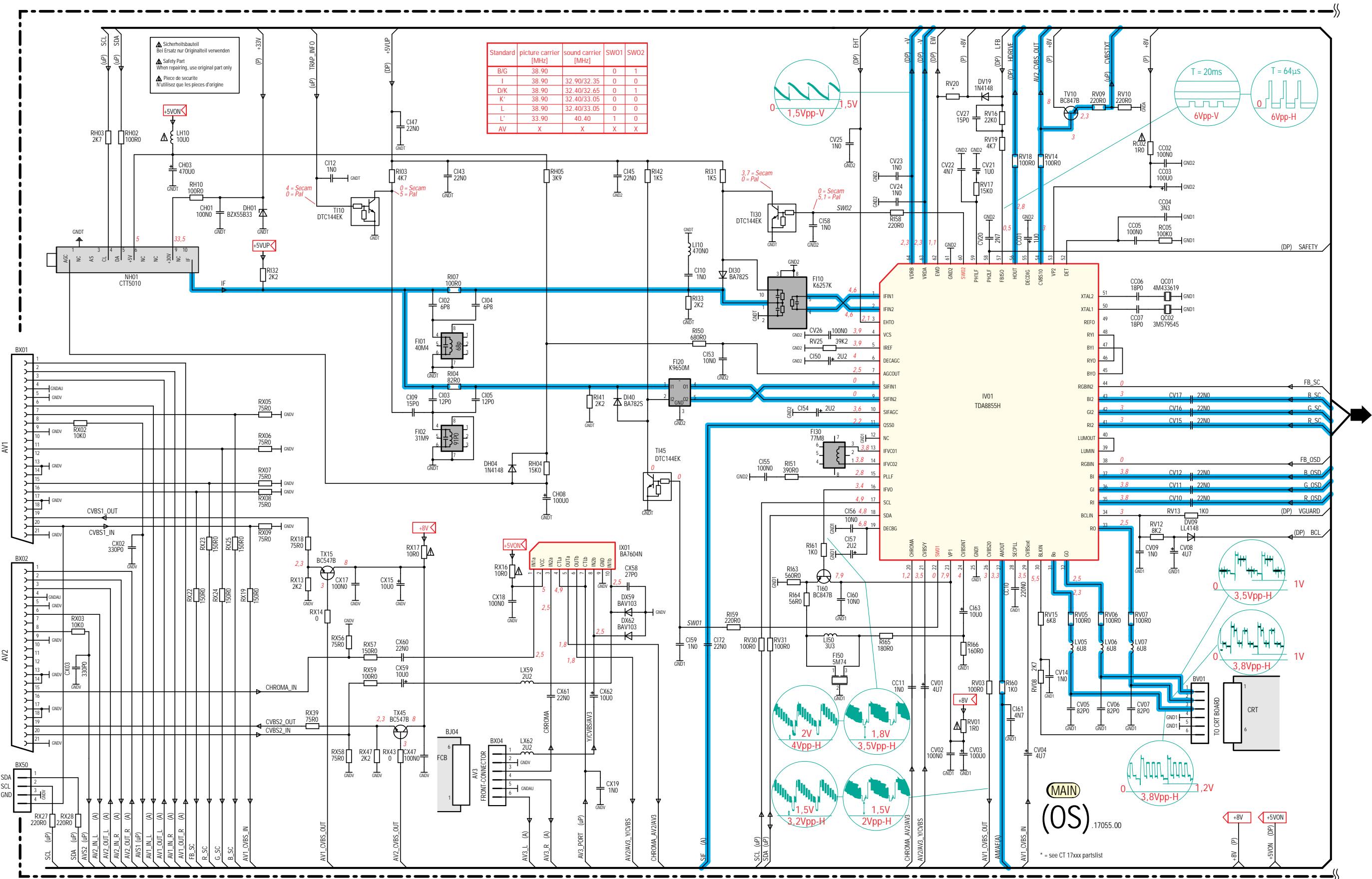
TV ASY A51EFS83X191 03	
Tube 4/3 21" OT	
10555770	TV PSD CT 17035 26
CL21	8N3F +3.5% -3.5% 1K6V
CL22	33NOF +5% -5% 1K0V
CL24	440NOF +5% -5% 250.0V
CL41	11NOF +10% -10% 50.0V
CL48	10K0 OHM +1% 63.0V
DL48	D-SLP BAV103 200.0V
DL71	D-ZENER BZX55C30 30V 500MIOW
JL60	WIREBARE 22
JL80	0 OHM +0% 100MIOW
LB02	LF 18UOH +7% -7%
LL05	TF-DST M30FBC3 10555640 3087 A0
LL22	LF 650UOH +5% -5% R 2873 A0 00
LL26	LL 85UOH 2519 A0
RF05	1R5 OHM +1% 700MIOW
RF06	10R0 OHM +1% 100MIOW
RL02	6K04 OHM +1% 100MIOW
RL03	10K0 OHM +1% 100MIOW
RL04	10K0 OHM +1% 100MIOW
RL05	4K75 OHM +1% 100MIOW
RL06	6K81 OHM +1% 100MIOW
RL07	13K0 OHM +5% 100MIOW
RL08	150K0 OHM +5% 100MIOW
RL09	76K8 OHM +1% 100MIOW
RL10	560K0 OHM +5% 100MIOW
RL11	RCF 4K7 OHM +5% 250MIOW
RL12	23K7 OHM +1% 250MIOW
RV20	RMF 33K2 OHM +1% 250MIOW

TV ASY A59EGD048X30 19	
TV ASY A68EGD038X30 (A) 68 00	
Tube 4/3 25" SF, 29" SF	
10515520	TV PSD CT 17071 26
CL21	16N2F +3.5% -3.5% 1K6V
CL22	30NOF +5% -5% 400.0V
CL24	510NOF +5% -5% 250.0V
CL41	100POF +10% -10% 50.0V
CL48	10NOF +10% 63.0V
DL48	D-SLP BAV103 200.0V
DL71	D-ZENER BZX55C30 30V 500MIOW
JL60	WIREBARE 22
JL80	0 OHM +0% 100MIOW
LB02	LF 18UOH +7% -7%
LL05	TF-DST M30FBC3 10555640 3087 A0
LL22	LF 650UOH +5% -5% R 2873 A0 00
LL26	LL 85UOH 2519 A0
RF05	1R5 OHM +1% 700MIOW
RF06	10R0 OHM +1% 100MIOW
RL02	6K04 OHM +1% 100MIOW
RL03	10K0 OHM +1% 100MIOW
RL04	10K0 OHM +1% 100MIOW
RL05	4K75 OHM +1% 100MIOW
RL06	6K81 OHM +1% 100MIOW
RL07	13K0 OHM +5% 100MIOW
RL08	150K0 OHM +5% 100MIOW
RL09	76K8 OHM +1% 100MIOW
RL10	560K0 OHM +5% 100MIOW
RL11	RCF 4K7 OHM +5% 250MIOW
RL12	23K7 OHM +1% 25

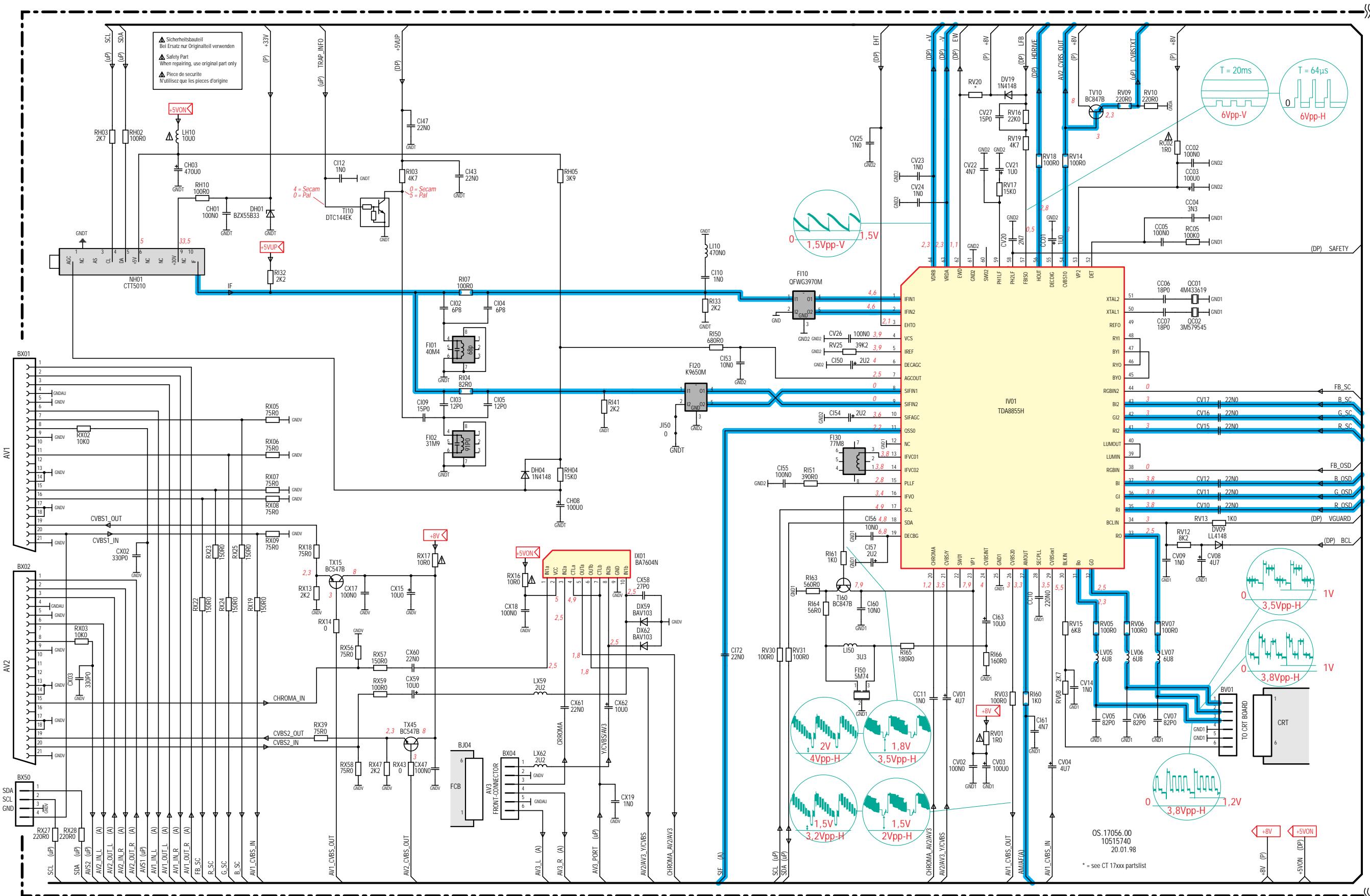
CONTROL MICROPROCESSOR - MICROPROCESSEUR DE COMMANDE - MIKROPROZESSOR - MICROPROCESSORE DEI COMANDI - MICROPROCESADOR DE LOS MANDOS



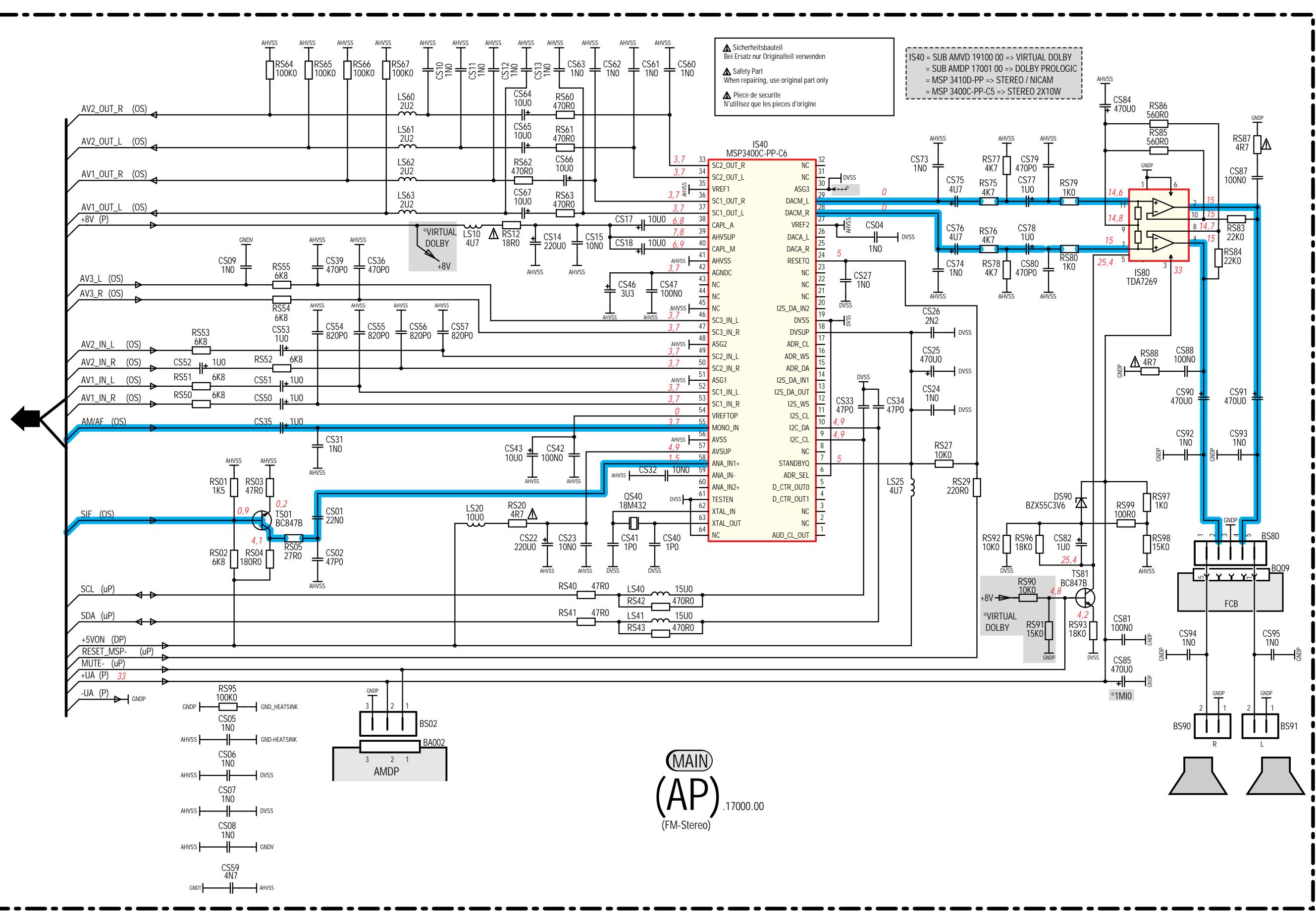
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO
 SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONNECTOR / TRATAMENTO VIDEO



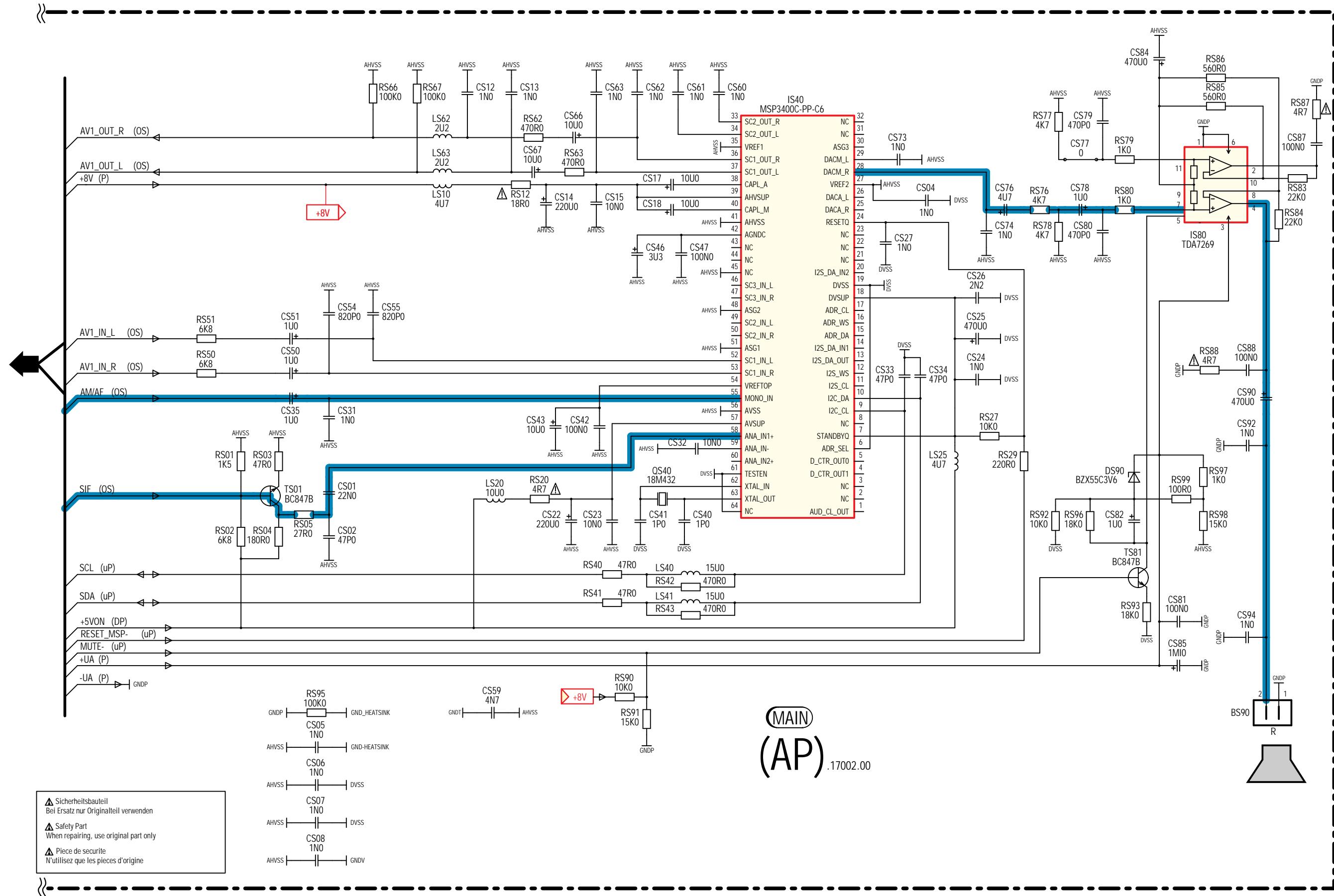
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PER TELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO
 SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR/TRATAMENTO VIDEO



AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE ESQUEMA DEL AMPLIFICADOR (STEREO)

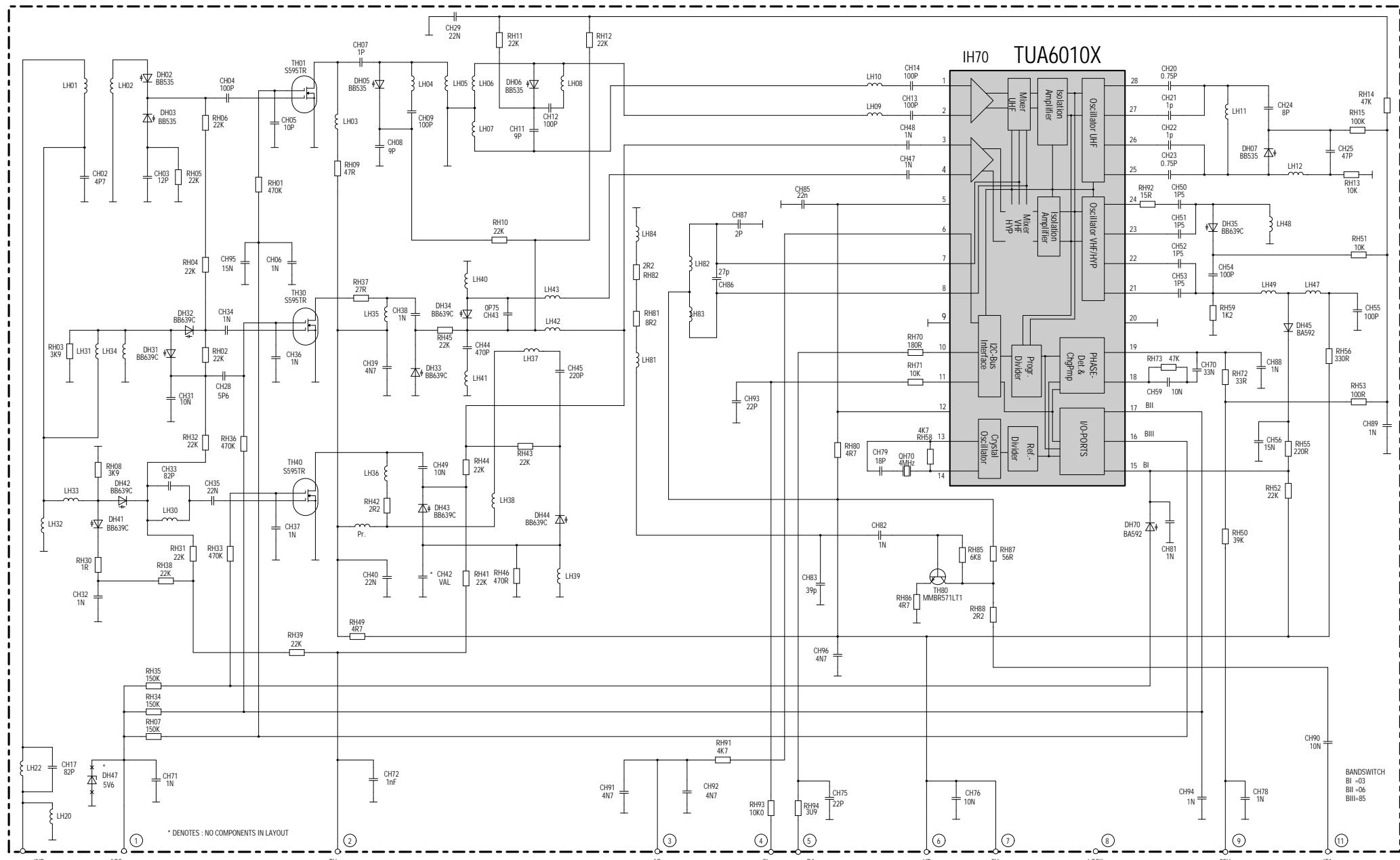


AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERABEITUNG - SCHEMA DELL' AMPLIFICATORE -
ESQUEMA DEL AMPLIFICADOR
(MONO)

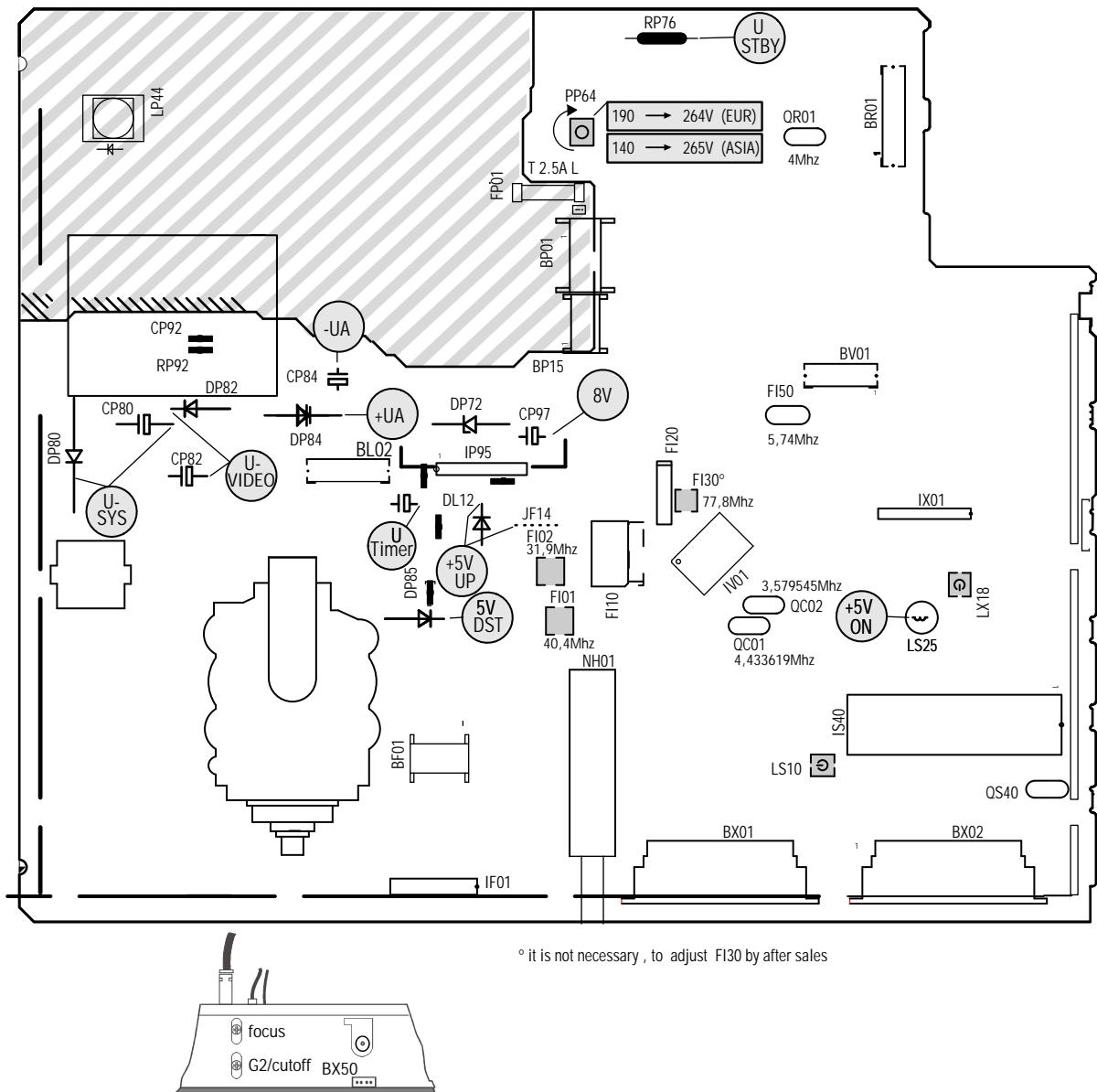


VHF / UHF TUNER CTT5010

(For information only)



LOCATION OF CONTROLS - EMPLACEMENT DES REGLAGES - SERVICE LAGEPLAN - POSIZIONE REGOLATORI DI SERVIZIO - SITUACIÓN DE LOS AJUSTES

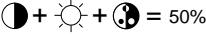
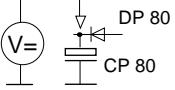
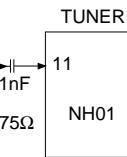
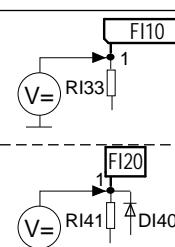
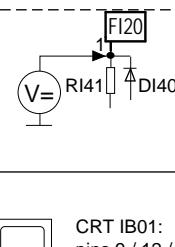
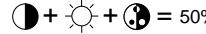
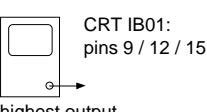
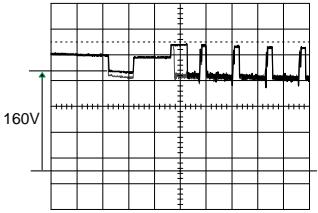


Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello châssis collegata alla rete.
Parte del chassís conectada a la red.



- Use isolating mains transformer -
- Utiliser un transformateur isolateur du secteur -
- Trenntrafo verwenden -
- Utilizar un transformador aislador de red -
- Utilizzare un trasformatore per isolarsi dalla rete

ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES

U Sys	PP 64			<table border="1"> <thead> <tr> <th>Tube</th><th>Format</th><th>Usys</th><th>Jumper</th><th>RL65</th></tr> </thead> <tbody> <tr><td>A51EFS83X191</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A59EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr><td>A66EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr><td>A59EGDD48X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A68EGDD38X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A68AGA25X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A80AEJ15X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>W56EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr><td>W66EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr><td>W76EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> </tbody> </table>	Tube	Format	Usys	Jumper	RL65	A51EFS83X191	4:3	126V+/-0,5V	JL80	4k7	A59EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A66EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A59EGDD48X30	4:3	126V+/-0,5V	JL80	4k7	A68EGDD38X30	4:3	126V+/-0,5V	JL80	4k7	A68AGA25X01	4:3	126V+/-0,5V	JL80	4k7	A80AEJ15X01	4:3	126V+/-0,5V	JL80	4k7	W56EGV023X015	16:9	138V+/-0,5V	JL82	47k	W66EGV023X015	16:9	138V+/-0,5V	JL82	47k	W76EGV023X015	16:9	138V+/-0,5V	JL82	47k
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IF Alignment Alignment FI	trap 40,4Mhz FI 01 ----- trap 31,9Mhz FI 02	<p>Switch set to standard BG Commuter le TV au standard BG</p> <p>IF Signal 40,4MHz (BG) 31,9MHz (BG)</p> 		Adjust FI01 for minimum value at 40,4Mhz																																																							
				Adjust FI20 for minimum value at 31,9Mhz																																																							
U G2 / cutoff	SCREEN	 <p>AV (no Signal, black screen)</p>																																																									
FOCUS	FOCUS LL05	 <p>Test pattern (standard values)</p>		Sharp picture																																																							

I - ENTER/EXIT SERVICE MODE - ENTREE/SORTIE DU MODE SERVICE

I ACCESSING THE SERVICE MODE

TV Control Panel Access

- Switch the TV into "Standby" mode by pressing the Standby button on the RCU.
- Switch "OFF" the mains supply to the TV and wait for the LED to extinguish.
- Whilst holding depressed the PR - and VOL- (8s), switch "ON" the mains supply to the TV.
- Once initialised, the **Main Service Menu** will appear on the screen of the TV.

Soft-Ver. V1.00-0 0080
Config. A5- - - -N
Serial-No. 103465071

▷ QUIT
TUBE
SETUP
GEOMETRY
VIDEO
IF

Please Note:

In the service mode :

- The CHILD LOCK function is re-initialised. The LOCK function (PIN number) is ignored.
- All Wake-up/Sleep timer settings are CLEARED.
- SCART socket pin 8 switching voltages are ignored.
- AV-Link, WSS Detection, EPG and TELETEXT functions are disabled.
- Automatic standby mode switching functions (no signal conditions) are disabled.
- Brightness, Colour and Contrast are set to factory defaults.
- Sharpness settings are set to MID position.
- Contrast Expand is set to LOW.
- Automatic INSTALL mode is disabled.
- FORMAT and ZOOM are reset to factory defaults.

I ACCES AU MODE SERVICE

Accès avec le clavier du téléviseur

- Commuter le téléviseur en position de veille avec la télécommande. Eteindre le téléviseur par l'interrupteur secteur (attendre l'extinction complète du voyant).
- Tout en appuyant sur les touches PR - et VOL -, mettre le TV en service à l'aide de la touche M/A.
- Maintenir enfoncées les touches PR - et VOL -. (8s)
Le menu suivant apparaît.

Soft-Ver. V1.00-0 0080
Config. A5- - - -N
Serial-No. 103465071

▷ QUIT
TUBE
SETUP
GEOMETRY
VIDEO
IF

Note :

En mode service :

- Le verrouillage parental est effacé (réinitialisé).
- La fonction de verrouillage (Pin number) est ignorée.
- La programmation des heures «réveille/matin» est annulée.
- Possibilité de passer en mode service avec commutation lente active.
- AV-Link, la détection WSS, l'EPG et le Vidéotexte ne sont pas validés.
- La fonction de stand-by automatique en cas d'absence de signal d'antenne n'est pas validée.
- Les valeurs de réglages usine sont affectées au contraste, à la couleur et à la lumière.
- Le contour est appelé à sa valeur moyenne.
- L'expansion contraste est au niveau bas.
- Le mode ambience «Light sensor» n'est pas validé.
- Zoom et format ignorées.

2 TEMPORARY EXIT FROM SERVICE MODE

- Press the "EXIT" button on the RCU.
- Pressing the "MENU" button on the RCU will activate the customer menus.

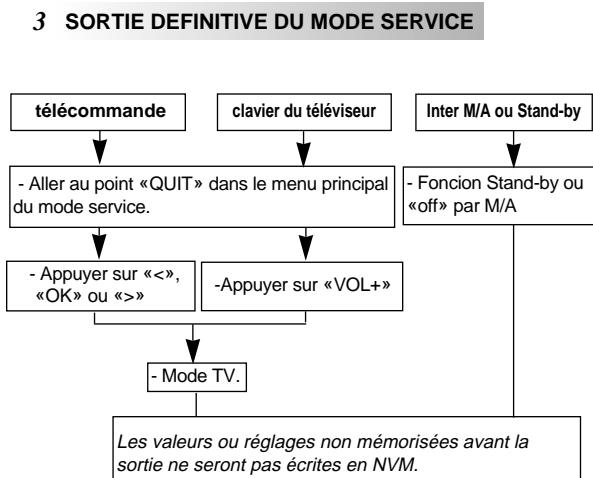
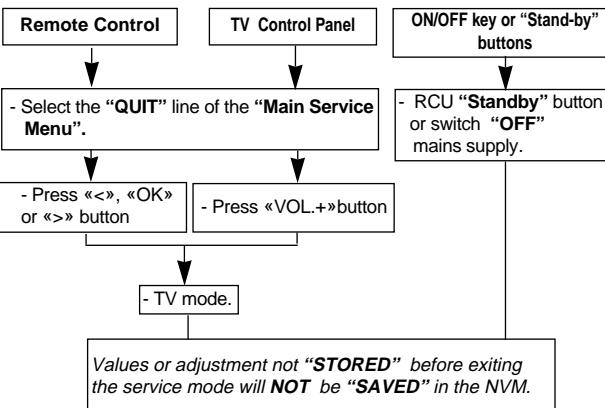
- The Service Menu can be re-entered by pressing the "BLUE" button on the RCU.

2 SORTIE TEMPORAIRE DU MODE SERVICE

- Utiliser la touche Exit de la télécommande.
- Le menu utilisateur peut être accessible via la touche «Menu».

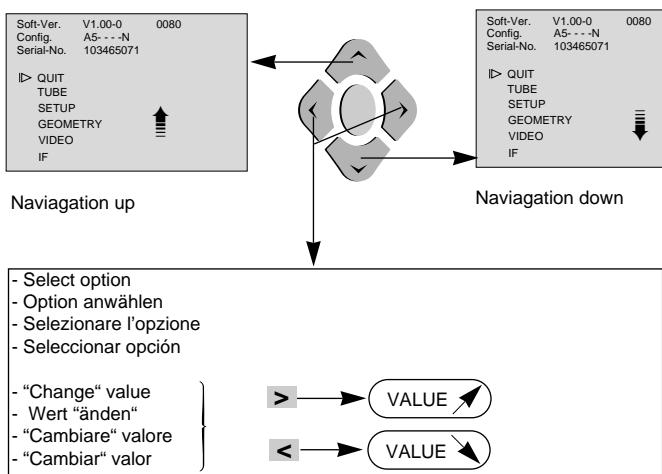
- Pour entrer à nouveau dans le mode service utiliser la touche bleue.

3 EXITING FROM SERVICE MODE

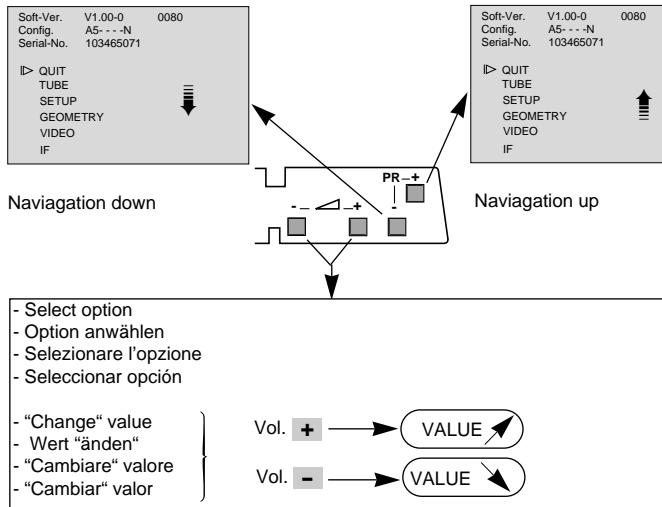


II - NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE FUNCTIONS WALLIN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO

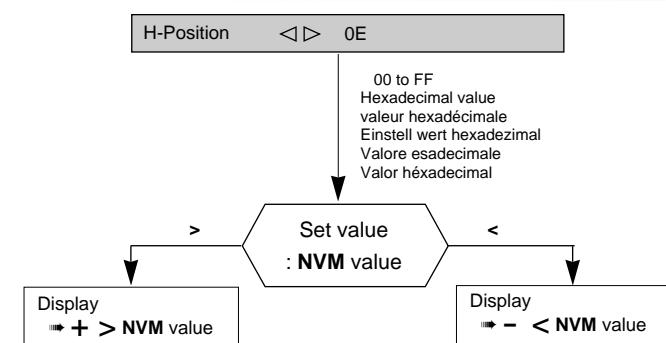
I REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG TELECOMANDO - MANDO A DISTANCIA



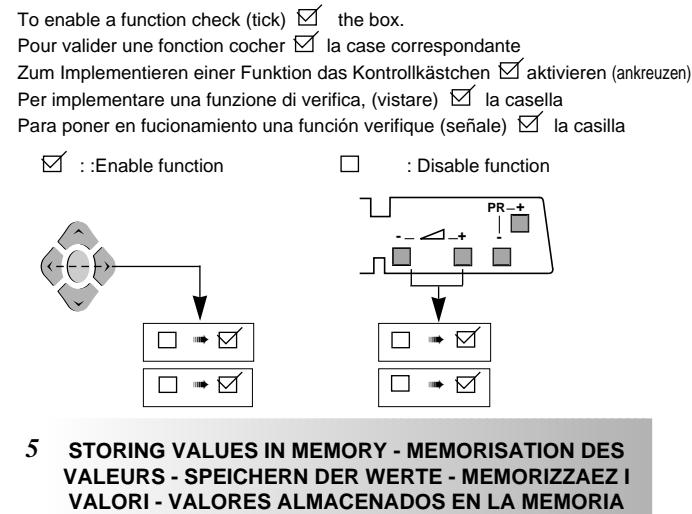
2 TV CONTROL PANEL - CLAVIER TV - TASTATUR DES FERNSEHGERÄTS - COMANDI DEL TELEVISORE -



3 DISPLAYING THE VALUE OF THE SETTING - AFFICHAGE DES VALEURS - ANZEIGE DES EINSTELL WERTS VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - VISUALIZACION DEL VALOR DE AJUSTE



4 TOGGLE FUNCTIONS - VALIDATION DES FONCTIONS EIN-UND AUSSCHALT FUNKTIONEN - FUNZIONI DI COMMUTAZIONE - FUNCION CONMUTACION



5 STORING VALUES IN MEMORY - MEMORISATION DES VALEURS - SPEICHERN DER WERTE - MEMORIZZAZEI VALORI - VALORES ALMACENADOS EN LA MEMORIA

After setting, the values are stored in NVM.
Après réglages les valeurs sont mémorisées en NVM.
Nach dem Einstellen werden die Werte im NVM gespeichert.
Dopo la regolazione i valori vengono memorizzati in NVM.
Después del ajuste, los valores son almacenados en NVM

The box becomes
During alignment, values are temporarily stored in RAM.
En cours d'alignement les valeurs sont mémorisées temporairement en RAM.
Während des Abgleichs werden die Werte vorübergehend im RAM gespeichert.
Durante l'allineamento i valori vengono memorizzati provisoriamente sulla RAM.
Durante el ajuste, los valores son almacenados temporalmente en RAM.

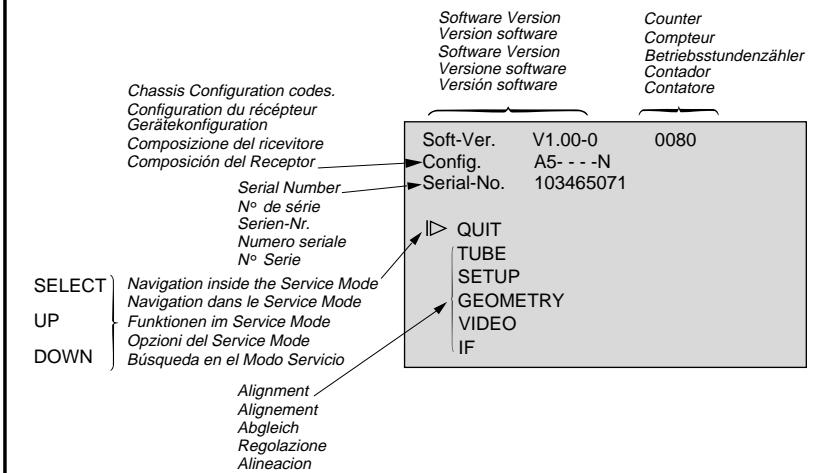
Store Copies RAM values into NVM
Copie la valeur RAM en NVM
Kopieren des Werts von RAM nach NVM
Copiare i valori RAM in NVM
Copiar valores RAM en NVM

Restore Copies all values from NVM into RAM.
Copie toutes les valeurs des données NVM en RAM
Kopiert alle NVM-Datenwerte in den RAM
Copiare tutti i valori da NVM sulla RAM
Copiar todos los valores de NVM a RAM

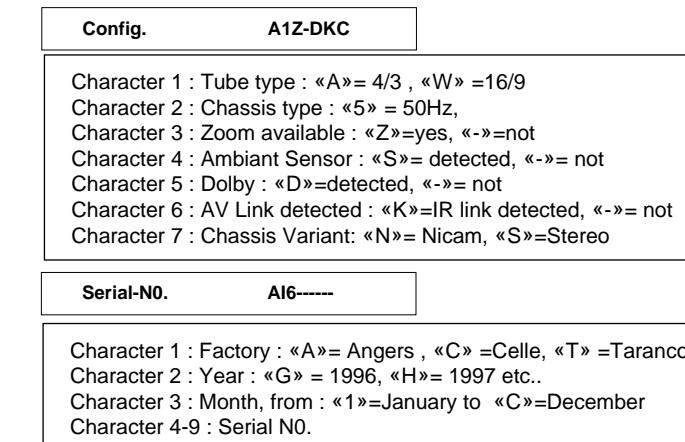
ROM Default All the default values of a page in use are stored in RAM.
L'ensemble des valeurs par défaut d'une page courante est chargé en RAM.
Sämtliche Standardwerte der aktuellen Seite werden im RAM geladen.
Tutti i valori di default di una pagina in uso vengono memorizzati sulla RAM.
Todos los valores por defecto de la página en curso están almacenados en RAM.

III - LITE-MENU FOR FIELD SERVICE MODE - MENUS DU MODE SERVICE

I MAIN MENU - MENU PRINCIPAL



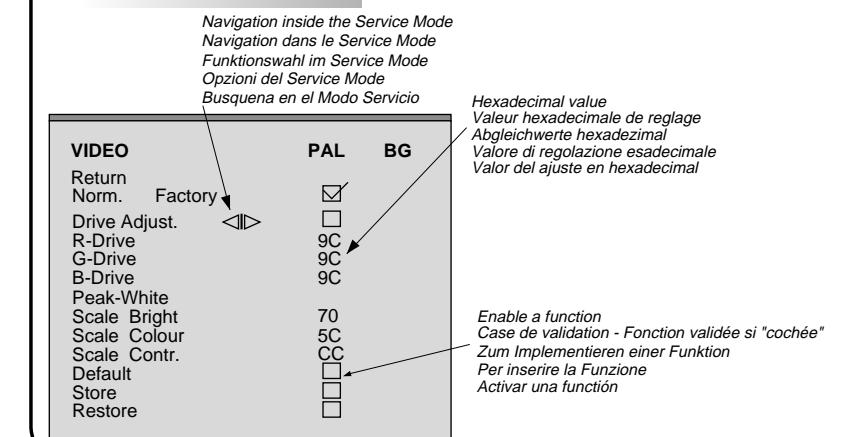
TV CONFIGURATION - CONFIGURATION DU TV - GERÄTEKONFIGURATION - CONFIGURAZIONE DEL TV - CONFIGURACIÓN DEL TV



TIME COUNTER - COMPTEUR DE TEMPS - BETRIEBSSTUNDENZÄHLER - CONTATORE - CONTADOR

The counter indicates the TV's number of service hours. It counts from 0 to 65535 hours.
The display is hexadecimal.
Le compteur indique le nombre d'heures de service du TV. Il compte de 0 à 65535 heures. L'affichage est en hexadécimal.
Der Zähler zeigt an, wieviele Stunden der Fernseher in Betrieb ist. Die Anzeige ist hexadecimale.
Il contatore indica il numero di ore di servizio del TV. Puo' contatore da 0 a 65535. La visualizzazione è esadecimale.
El contador indica el número de horas de servicio de la TV. Cuenta de 0 a 65535 horas. El visualizador es hexadecimal.

2 SUBMENU - SOUS-MENU



ALIGNMENT PROCEDURE - PROCESSUS DE REGLAGES - ABGLEICH - VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - PROCEDIMIENTO DE ALINEACION

TUBE	
Return	
Tube type	A66ECY...
Store	<input checked="" type="checkbox"/>
Restore	<input type="checkbox"/>

SETUP	
Return	
Clear Progs.	<input type="checkbox"/>
Kbd. Config.	Default
WSS	<input type="checkbox"/>
Default	<input type="checkbox"/>
Store	<input type="checkbox"/>
Restore	<input type="checkbox"/>

GEOMETRY	
Return	
V-Slope	7C
V-Amplitude	6C
V-Position	<input type="checkbox"/>
Blanking On	7C
S - Correction	54
H-Position	94
H-Amplitude	70
EW-Amplitude	78
EW-Trapezium	98
Default	<input type="checkbox"/>
Store	<input type="checkbox"/>
Restore	<input type="checkbox"/>

VIDEO	PAL	BG
Return	Factory	<input checked="" type="checkbox"/>
Drive Adjust.	<input type="checkbox"/>	
R-Drive	9C	
G-Drive	9C	
B-Drive	9C	
Peak-White	70	
Scale Bright	5C	
Scale Colour	CC	
Scale Contr.	<input type="checkbox"/>	
Default	<input checked="" type="checkbox"/>	
Store	<input checked="" type="checkbox"/>	
Restore	<input type="checkbox"/>	

IF	
Return	
AGC Take Over	<input type="checkbox"/>
FFI - Bit	<input type="checkbox"/>
Default	<input checked="" type="checkbox"/>
Store	<input checked="" type="checkbox"/>
Restore	<input checked="" type="checkbox"/>

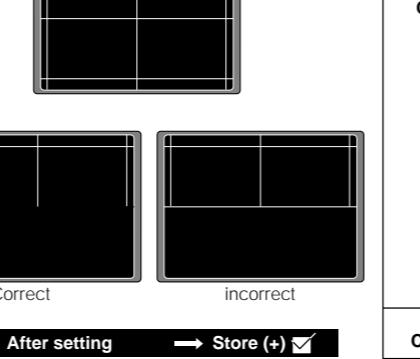
TUBE	
Return	Closes the sub-menu and returns to the "Main Service Menu". Press </> on the RCU or VOL+/VOL- on TV front panel.
Tube type	Retourne au menu principal.
Verlassen des Untermenüs,das Hauptmenü	Verlassen des Untermenüs.
Chiu il sottomenù e fa apparire il menu principale Field Service Mode.	Chiu il sottomenù. El menú Field Service Mode aparece.
Chiu el sotmenú e fa apparire il menu principale Field Service Mode.	Chiu el sotmenú. El menú Field Service Mode aparece.
Cierra el submenú. El menú Field Service Mode aparece.	Press </>: remote control; Vol. +/- : TV keyb.

SETUP	
Return	Closes the sub-menu and returns to the "Main Service Menu".
Verlassen des Untermenüs	Retourne au menu principal.
Chiu il sottomenù e fa apparire il menu principale Field Service Mode.	Chiu il sottomenù e fa apparire il menu principale Field Service Mode.
Chiu el sotmenú e fa apparire il menu principale Field Service Mode.	Chiu el sotmenú e fa apparire il menu principale Field Service Mode.
Cierra el submenú. El menú Field Service Mode aparece.	Press </>: remote control; Vol. +/- : TV keyb.

GEOMETRY	
Return	Closes the sub-menu and returns to the "Main Service Menu".
Verlassen des Untermenüs	Retourne au menu principal.
Chiu il sottomenù e fa apparire il menu principale Field Service Mode.	Chiu il sottomenù e fa apparire il menu principale Field Service Mode.
Chiu el sotmenú e fa apparire il menu principale Field Service Mode.	Chiu el sotmenú. El menú Field Service Mode aparece.
Cierra el submenú. El menú Field Service Mode aparece.	Press </>: remote control; Vol. +/- : TV keyb.

GEOMETRY	
9.Adjust position H.	
9.Regler la position H	
9.Korrigieren Sie Horizontale Lage.	
9.Regolare la posizione H	
9.Ajuste la posición H	
10.Ajuster l'amplitude H	
10.Adjust amplitude H	
10.Korrigieren Sie Horizontal-Amplitude	
10.Regulare l'amplitude H	
10.Ajuste la amplitud H	
11-12.Correction of EW pincushion distortion.	
11-12.Corrrection of cossus EW	
11-12.Korrektur der Ost/West Kissenvierzerrung.	
11-12.Correzione della distorsione a cuscino EW	
11-12.Corrección de la distorsión de cojín EW	
13.Correction of corners (Shape).	
13.Correction de coins (Shape)	
13.Korrektur der Ecken.	
13.Correzione degli angoli (Forma)	
13.Correzione di esquinas (Shape)	
14.Trapeze. / Trapéze	
14.Trapezio- / Trapéze	
14.Trapezio-Verzerrung.	
14.Trapezio / Trapézo	
"These adjustments are not necessary for 4:3 tubes in 16:9 mode"	
"Pour les tubes 4/3 en mode 16/9, ces réglages ne sont pas nécessaire"	
"Diese Einstellungen sind nicht für 4:3 Bildröhren im 16:9 Betrieb erforderlich."	
"Queste regolazioni non sono necessarie per tubi 4/3 in modo 16/9"	
"Estos ajustes no son necesarios para los tubos 4/3 en modo 16/9"	
3.Select "Blanking On" line of the menu and ENABLE (tick) the function, the bottom half of the screen will go black.	
3.Postinier dans le mode Service Blanking. On la moitié basse de l'écran devient noire	
3.Schalten Sie den Blanken Mode ein. Die untere Hälfte des Bildschirms wird schwarz.	
3.Posizionarsi in modo Service Blanking on; la parte inferiore dello schermo diventa nera	
3.Pase al modo Service Blanking On. La mitad inferior de la pantalla se vuelve negra.	
4.Select the "V-Slope" line of the menu and adjust its value until the centre line of the pattern is just invisible.	
4.Aligner "Vertical - Slope" pour que la ligne médiane soit à peine non visible	
4.Regeln Sie "V-Slope" so ein, dass die Mittellinie nahezu verschwindet.	
4.Alinee "Vertical Slope" para que la linea media sea casi invisible.	
5.Return to the "Blanking On" line of the menu and DISABLE (un-tick) the function.	
5.Revenir à Blanken On et mettre	
5.Schalten Sie den Blanken Mode wieder ein und	
5.Ritornare in modo Blanking on e porre	
5.Vuelva a "Blanking on" y poner	
6.Switch the test pattern signal to the crossherring geometry pattern.	
6.Positioner la mire de quadrillage.	
6.Speisen Sie ein Gittertestbild ein.	
6.Posizionare il monoscopio.	
6.Coloque la plantilla cuadrículada.	
7.Perform the geometry adjustments described below.	
7.Effectuer les réglages de géométrie décrits ci-dessous	
7.Nehmen Sie die Geometrieeinstellung wie unten beschrieben vor:	
7.Effettuare le regolazioni di geometria descritte in precedenza	
7.Efectúe los ajustes geométricos descritos más abajo.	
8.Store /Memoriser /Speichern /Memorizzare /Almacene	

WSS	Automatic detection of DOLBY surround sound and 16/9 Format pictures via Teletext line number 23 is valid on all programmes.
Sélection du process WSS valid pour tous programmes	
WSS (nur bei 16:9 oder Dolby)	Auswertung der Zelle 23 zur automatischen Format umschaltung und Dolby umschaltung
Identification "auto-surround" e "format" tramite il televisori, decodificando la riga 23. La selezione di WSS è valida per tutti i programmi.	
Detección "auto-surround" y "format" a través de la línea 23 de Teletext. La selección del procesamiento WSS es válida para todos los programas.	
<input checked="" type="checkbox"/> detect.enable- aktiv	<input type="checkbox"/> disable-inaktiv



Correct incorrect

→ After setting → Store (+)

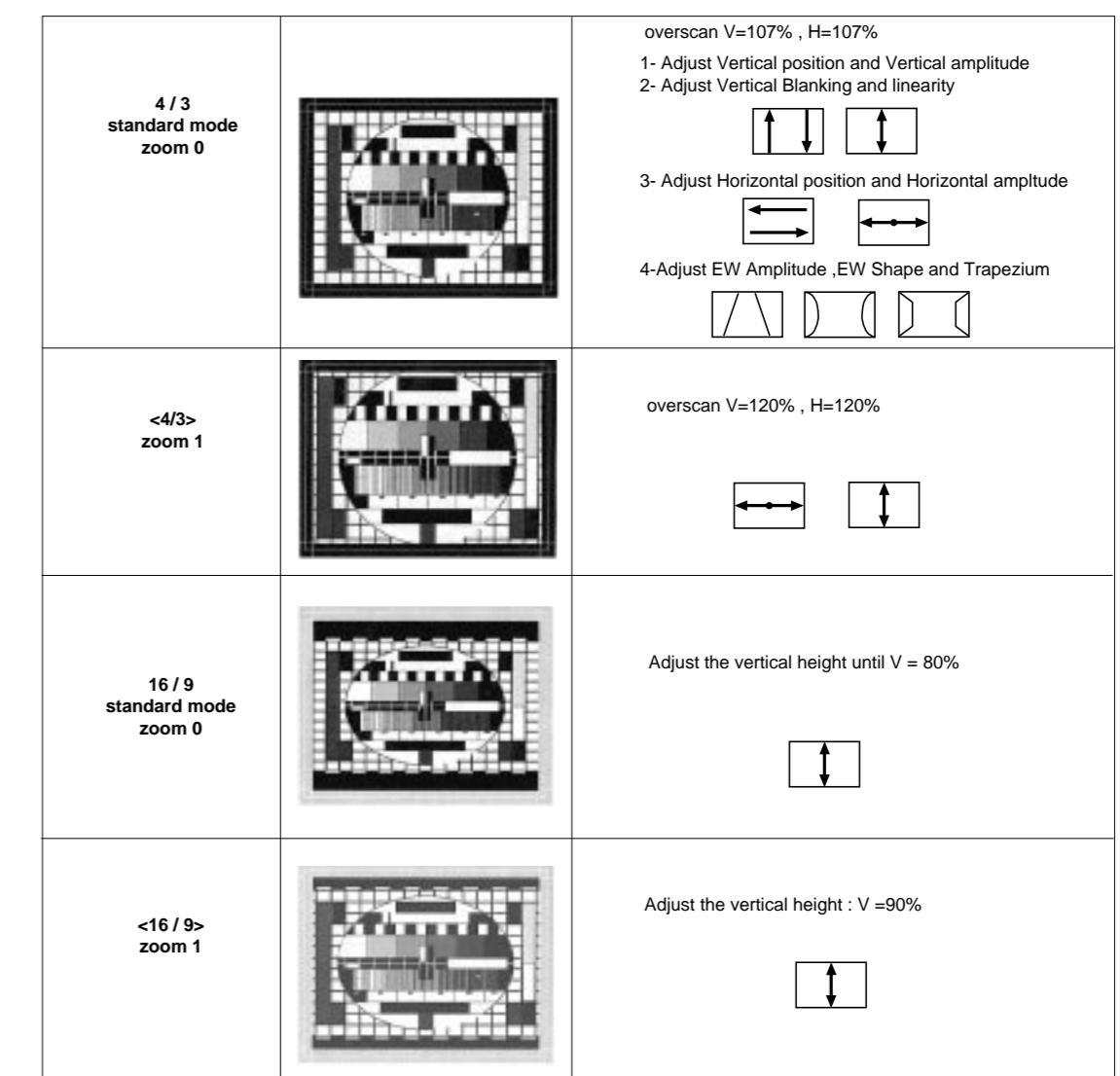
VIDEO	PAL	BG
Return	Factory	<input checked="" type="checkbox"/>
Drive Adjust.	<input type="checkbox"/>	
R-Drive	9C	
G-Drive	9C	
B-Drive	9C	
Peak-White	70	
Scale Bright	5C	
Scale Colour	CC	
Scale Contr.	<input type="checkbox"/>	
Default	<input checked="" type="checkbox"/>	
Store	<input checked="" type="checkbox"/>	
Restore	<input type="checkbox"/>	

IF	
Return	
AGC Take Over	<input type="checkbox"/>
FFI - Bit	<input type="checkbox"/>
Default	<input checked="" type="checkbox"/>
Store	<input checked="" type="checkbox"/>
Restore	<input checked="" type="checkbox"/>

GEOMETRY MODE ALIGNMENT

4/3 picture tube

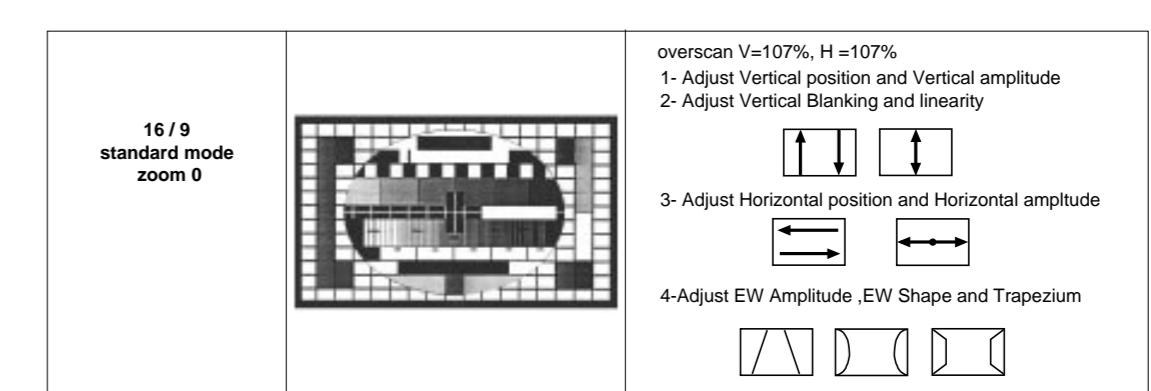
Signal : 4/3 test pattern



Note :
 * adjust separate for PAL/NTSC/SECAM and RGB/AV
 * adjust separate for PAL/SECAM and RGB/AV
 * After PEAK white adjustment control cut off setting.
 Repeat the adjustments if necessary.
 Nach der Einstellung von "Peak white" die "Cut off"-Einstellungen wiederholen.

16/9 picture tube

Signal : 4/3 test pattern



Tube Name	LIST name	Description
A51EFS83X191	A51EFS	4:3-21° OT- AK-Mask: Ccty-M
A59EHJ43X15	A59EHJ	4:3-25° MP- AK-Mask: Vector
A66EHJ43X15	A66EHJ	4:3-28° MP- AK-Mask: Vector
A68EGD039X30	A68EGD	4:3-29° SF- Invr-Mask: Vector
A90AEJ13X01	A90AEJ	4:3-33° MP AK-Mask: Ccty-M
A90EGD049X30	A90EGD	4:3-25° SF- Invr-Mask: Vector
A68AGA25X01	A68AGA	4:3-29° VHP- AK-Mask: Ccty-M
W56EGV023X015	W56EGV	16:9-24° SF- Invr-Mask: Vector
W66EGV023X015	W66EGV	16:9-28° SF- Invr-Mask: Vector
W76EGV023X015	W76EGV	16:9-32° SF- Invr-Mask: Vector

Definir el tubo correcto después de haber cambiado el NVM.6 caracteres.Los nuevos valores de tipo de tubo (con la y la geometria por defecto) se activan inmediatamente. Los parámetros variables de geometria y video se graban en el NVM al seleccionar la función Store. Vea más abajo la lista de tubos.

→ After setting → Store (+)

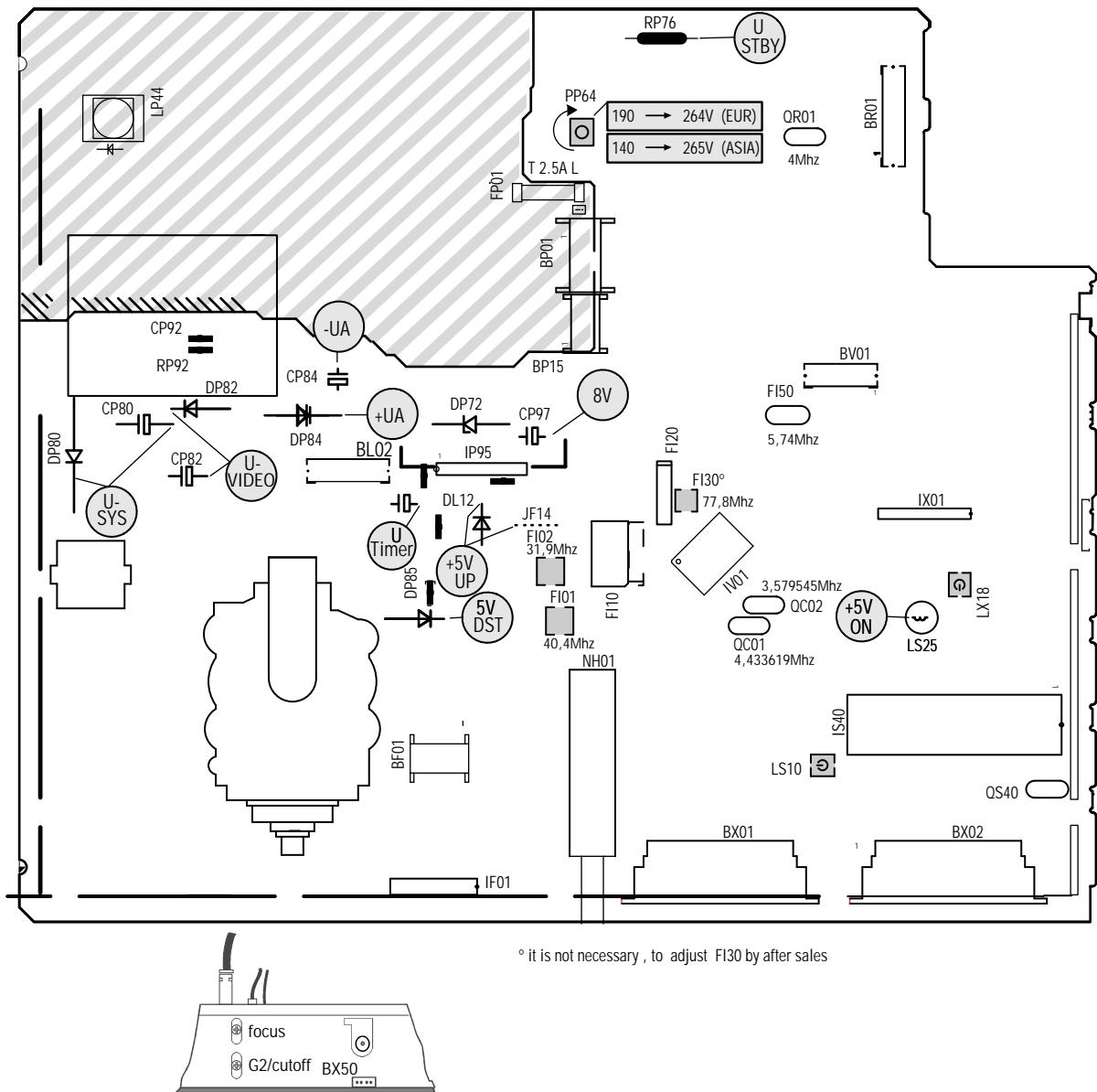
Tube Name	LIST name	Description
A51EFS83X191	A51EFS	4:3-21° OT- AK-Mask: Ccty-M
A59EHJ43X15	A59EHJ	4:3-25° MP- AK-Mask: Vector
A66EHJ43X15	A66EHJ	4:3-28° MP- AK-Mask: Vector
A68EGD039X30	A68EGD	4:3-29° SF- Invr-Mask: Vector
A90AEJ13X01	A90AEJ	4:3-33° MP AK-Mask: Ccty-M
A90EGD049X30	A90EGD	4:3-25° SF- Invr-Mask: Vector
A68AGA25X01	A68AGA	4:3-29° VHP- AK-Mask: Ccty-M
W56EGV023X015	W56EGV	16:9-24° SF- Invr-Mask: Vector
W66EGV023X015	W66EGV	16:9-28° SF- Invr-Mask: Vector
W76EGV023X015	W76EGV	16:9-32° SF- Invr-Mask: Vector

Definir el tubo correcto después de haber cambiado el NVM.6 caracteres.Los nuevos valores de tipo de tubo (con la y la geometria por defecto) se activan inmediatamente. Los parámetros variables de geometria y video se graban en el NVM al seleccionar la función Store. Vea más abajo la lista de tubos.

→ After setting → Store (+)

Tube Name	LIST name	Description
A51EFS83X191	A51EFS	4:3-21° OT- AK-Mask: Ccty-M
A59EHJ43X15	A59EHJ	4:3-25° MP- AK-Mask: Vector
A66EHJ43X15	A66EHJ	4:3-28° MP- AK-Mask: Vector
A68EGD039X30	A68EGD	4:3-29° SF- Invr-Mask: Vector
A90AEJ13X01	A90AEJ	4:3-33° MP AK-Mask: Ccty-M
A90EGD049X30	A90EGD	4:3-25° SF- Invr-Mask: Vector
A68AGA25X01	A68AGA	4:3-29° VHP- AK-Mask: Ccty-M
W56EGV023X015	W56EGV	16:9-24° SF- Invr-Mask: Vector
W66EGV023X015	W66EGV	16:9-28° SF- Invr-Mask: Vector

LOCATION OF CONTROLS - EMPLACEMENT DES REGLAGES - SERVICE LAGEPLAN - POSIZIONE REGOLATORI DI SERVIZIO - SITUACIÓN DE LOS AJUSTES

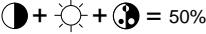
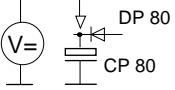
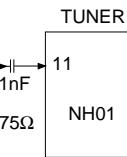
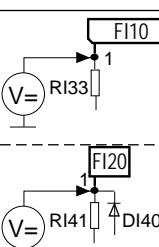
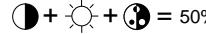
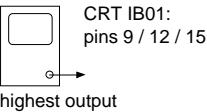
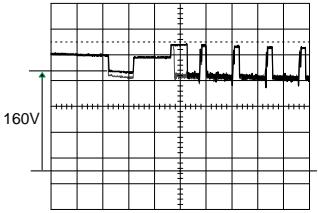


Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello châssis collegata alla rete.
Parte del chassís conectada a la red.



- Use isolating mains transformer -
- Utiliser un transformateur isolateur du secteur -
- Trenntrafo verwenden -
- Utilizar un transformador aislador de red -
- Utilizzare un trasformatore per isolarsi dalla rete

ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES

U Sys	PP 64			<table border="1"> <thead> <tr> <th>Tube</th><th>Format</th><th>Usys</th><th>Jumper</th><th>RL65</th></tr> </thead> <tbody> <tr><td>A51EFS83X191</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A59EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr><td>A66EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr><td>A59EGDD48X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A68EGDD38X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A68AGA25X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A80AEJ15X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>W56EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr><td>W66EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr><td>W76EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> </tbody> </table>	Tube	Format	Usys	Jumper	RL65	A51EFS83X191	4:3	126V+/-0,5V	JL80	4k7	A59EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A66EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A59EGDD48X30	4:3	126V+/-0,5V	JL80	4k7	A68EGDD38X30	4:3	126V+/-0,5V	JL80	4k7	A68AGA25X01	4:3	126V+/-0,5V	JL80	4k7	A80AEJ15X01	4:3	126V+/-0,5V	JL80	4k7	W56EGV023X015	16:9	138V+/-0,5V	JL82	47k	W66EGV023X015	16:9	138V+/-0,5V	JL82	47k	W76EGV023X015	16:9	138V+/-0,5V	JL82	47k
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IF Alignment Alignment FI	trap 40,4Mhz FI 01 trap 31,9Mhz FI 02	<p>Switch set to standard BG Commuter le TV au standard BG</p> <p>IF Signal 40,4MHz (BG) 31,9MHz (BG)</p> 		<p>Adjust FI01 for minimum value at 40,4Mhz</p> <p>Adjust FI20 for minimum value at 31,9Mhz</p>																																																							
U G2 / cutoff	SCREEN	 <p>AV (no Signal, black screen)</p>																																																									
FOCUS	FOCUS LL05	 <p>Test pattern (standard values)</p>		Sharp picture																																																							

I - ENTER/EXIT SERVICE MODE - ENTREE/SORTIE DU MODE SERVICE

I ACCESSING THE SERVICE MODE

TV Control Panel Access

- Switch the TV into "Standby" mode by pressing the Standby button on the RCU.
- Switch "OFF" the mains supply to the TV and wait for the LED to extinguish.
- Whilst holding depressed the PR - and VOL- (8s), switch "ON" the mains supply to the TV.
- Once initialised, the **Main Service Menu** will appear on the screen of the TV.

Soft-Ver. V1.00-0 0080
Config. A5- - - -N
Serial-No. 103465071

▷ QUIT
TUBE
SETUP
GEOMETRY
VIDEO
IF

Please Note:

In the service mode :

- The CHILD LOCK function is re-initialised. The LOCK function (PIN number) is ignored.
- All Wake-up/Sleep timer settings are CLEARED.
- SCART socket pin 8 switching voltages are ignored.
- AV-Link, WSS Detection, EPG and TELETEXT functions are disabled.
- Automatic standby mode switching functions (no signal conditions) are disabled.
- Brightness, Colour and Contrast are set to factory defaults.
- Sharpness settings are set to MID position.
- Contrast Expand is set to LOW.
- Automatic INSTALL mode is disabled.
- FORMAT and ZOOM are reset to factory defaults.

I ACCES AU MODE SERVICE

Accès avec le clavier du téléviseur

- Commuter le téléviseur en position de veille avec la télécommande. Eteindre le téléviseur par l'interrupteur secteur (attendre l'extinction complète du voyant).
- Tout en appuyant sur les touches PR - et VOL -, mettre le TV en service à l'aide de la touche M/A.
- Maintenir enfoncées les touches PR - et VOL -. (8s)
Le menu suivant apparaît.

Soft-Ver. V1.00-0 0080
Config. A5- - - -N
Serial-No. 103465071

▷ QUIT
TUBE
SETUP
GEOMETRY
VIDEO
IF

Note :

En mode service :

- Le verrouillage parental est effacé (réinitialisé).
- La fonction de verrouillage (Pin number) est ignorée.
- La programmation des heures «réveille/matin» est annulée.
- Possibilité de passer en mode service avec commutation lente active.
- AV-Link, la détection WSS, l'EPG et le Vidéotexte ne sont pas validés.
- La fonction de stand-by automatique en cas d'absence de signal d'antenne n'est pas validée.
- Les valeurs de réglages usine sont affectées au contraste, à la couleur et à la lumière.
- Le contour est appelé à sa valeur moyenne.
- L'expansion contraste est au niveau bas.
- Le mode ambience «Light sensor» n'est pas validé.
- Zoom et format ignorées.

2 TEMPORARY EXIT FROM SERVICE MODE

- Press the "EXIT" button on the RCU.
- Pressing the "MENU" button on the RCU will activate the customer menus.

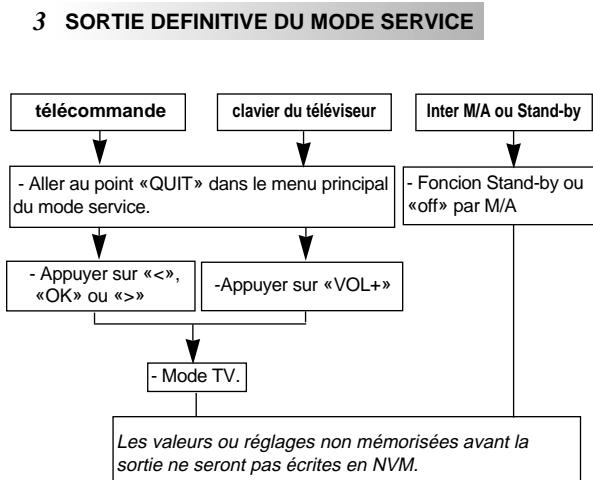
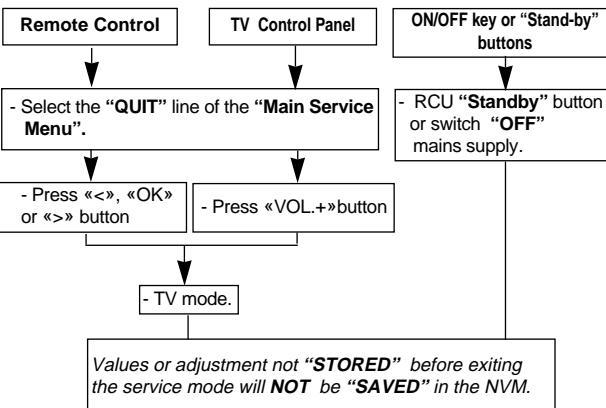
- The Service Menu can be re-entered by pressing the "BLUE" button on the RCU.

2 SORTIE TEMPORAIRE DU MODE SERVICE

- Utiliser la touche Exit de la télécommande.
- Le menu utilisateur peut être accessible via la touche «Menu».

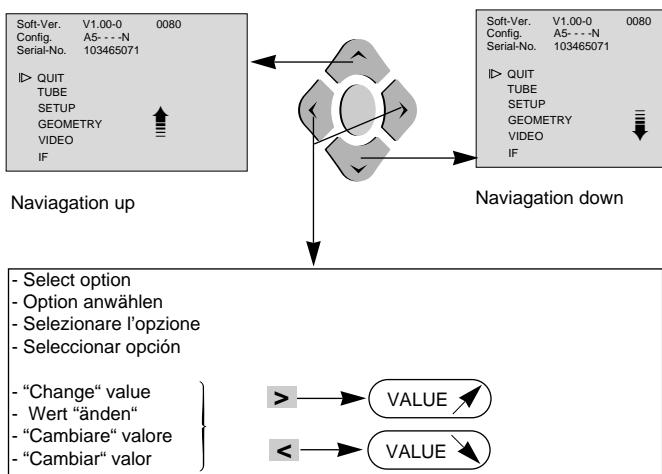
- Pour entrer à nouveau dans le mode service utiliser la touche bleue.

3 EXITING FROM SERVICE MODE

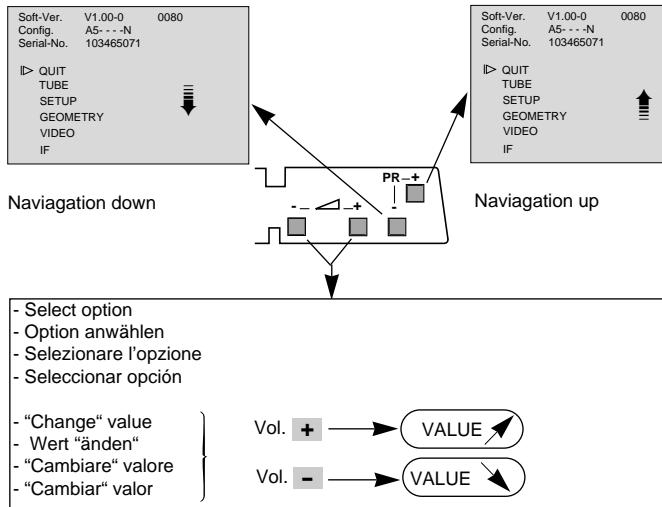


II - NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE FUNCTIONS WALLIN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO

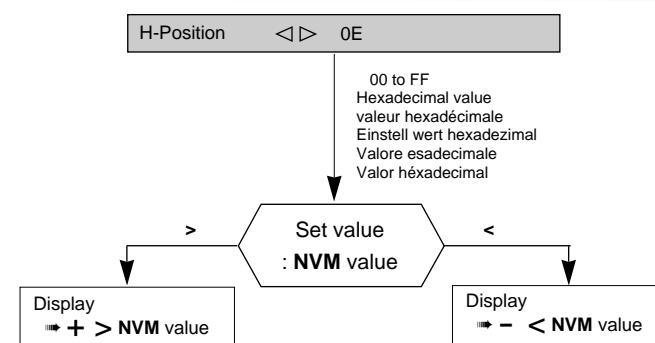
I REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG TELECOMANDO - MANDO A DISTANCIA



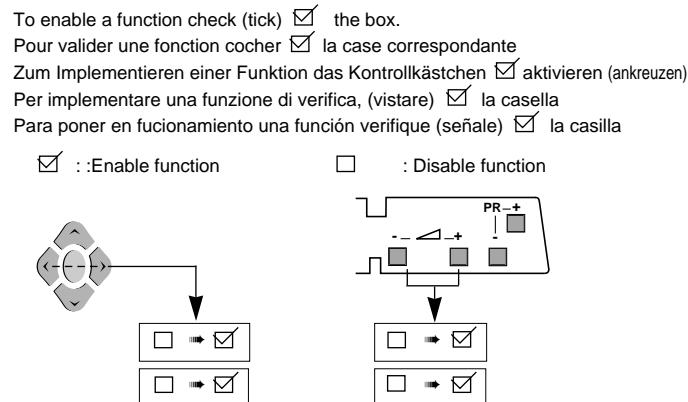
2 TV CONTROL PANEL - CLAVIER TV - TASTATUR DES FERNSEHGERÄTS - COMANDI DEL TELEVISORE -



3 DISPLAYING THE VALUE OF THE SETTING - AFFICHAGE DES VALEURS - ANZEIGE DES EINSTELL WERTS VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - VISUALIZACION DEL VALOR DE AJUSTE



4 TOGGLE FUNCTIONS - VALIDATION DES FONCTIONS EIN-UND AUSSCHALT FUNKTIONEN - FUNZIONI DI COMMUTAZIONE - FUNCION CONMUTACION



5 STORING VALUES IN MEMORY - MEMORISATION DES VALEURS - SPEICHERN DER WERTE - MEMORIZZAZEI VALORI - VALORES ALMACENADOS EN LA MEMORIA

After setting, the values are stored in NVM.
Après réglages les valeurs sont mémorisées en NVM.
Nach dem Einstellen werden die Werte im NVM gespeichert.
Dopo la regolazione i valori vengono memorizzati in NVM.
Después del ajuste, los valores son almacenados en NVM

The box becomes
During alignment, values are temporarily stored in RAM.
En cours d'alignement les valeurs sont mémorisées temporairement en RAM.
Während des Abgleichs werden die Werte vorübergehend im RAM gespeichert.
Durante l'allineamento i valori vengono memorizzati provisoriamente sulla RAM.
Durante el ajuste, los valores son almacenados temporalmente en RAM.

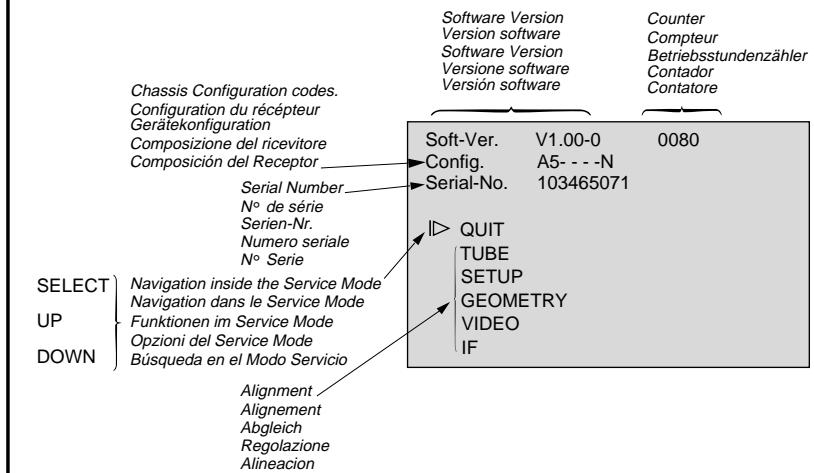
Store Copies RAM values into NVM
Copie la valeur RAM en NVM
Kopieren des Werts von RAM nach NVM
Copiare i valori RAM in NVM
Copiar valores RAM en NVM

Restore Copies all values from NVM into RAM.
Copie toutes les valeurs des données NVM en RAM
Kopiert alle NVM-Datenwerte in den RAM
Copiare tutti i valori da NVM sulla RAM
Copiar todos los valores de NVM a RAM

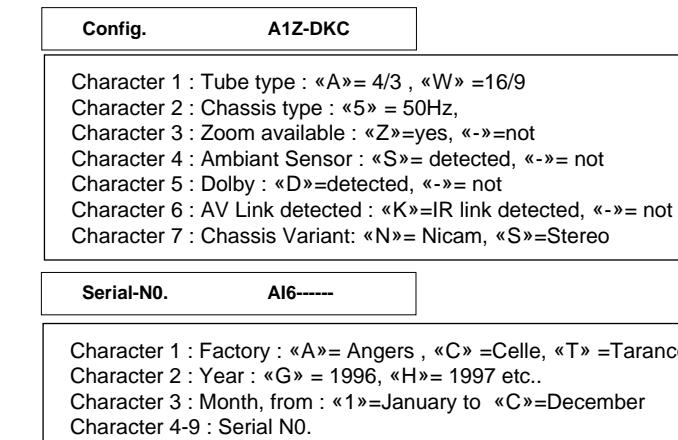
ROM Default All the default values of a page in use are stored in RAM.
L'ensemble des valeurs par défaut d'une page courante est chargé en RAM.
Sämtliche Standardwerte der aktuellen Seite werden im RAM geladen.
Tutti i valori di default di una pagina in uso vengono memorizzati sulla RAM.
Todos los valores por defecto de la página en curso están almacenados en RAM.

III - LITE-MENU FOR FIELD SERVICE MODE - MENUS DU MODE SERVICE

I MAIN MENU - MENU PRINCIPAL



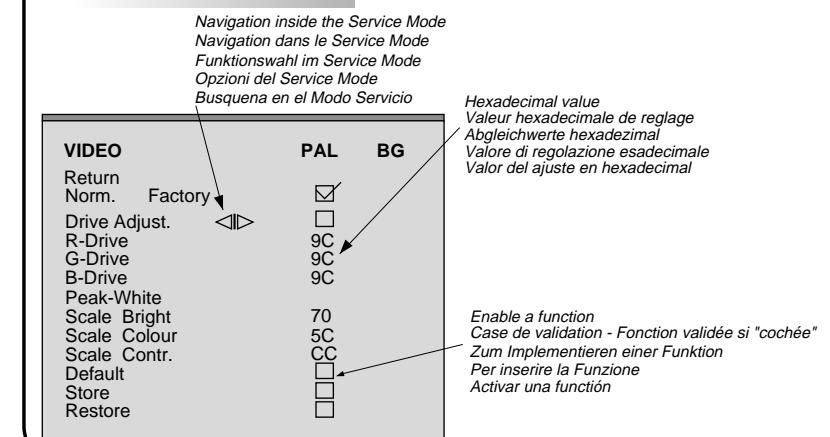
TV CONFIGURATION - CONFIGURATION DU TV - GERÄTEKONFIGURATION - CONFIGURAZIONE DEL TV - CONFIGURACIÓN DEL TV



TIME COUNTER - COMPTEUR DE TEMPS - BETRIEBSSTUNDENZÄHLER - CONTATORE - CONTADOR

The counter indicates the TV's number of service hours. It counts from 0 to 65535 hours.
The display is hexadecimal.
Le compteur indique le nombre d'heures de service du TV. Il compte de 0 à 65535 heures. L'affichage est en hexadécimal.
Der Zähler zeigt an, wieviele Stunden der Fernseher in Betrieb ist. Die Anzeige ist hexadecimale.
Il contatore indica il numero di ore di servizio del TV. Puo' contatore da 0 a 65535. La visualizzazione è esadecimale.
El contador indica el número de horas de servicio de la TV. Cuenta de 0 a 65535 horas. El visualizador es hexadecimal.

2 SUBMENU - SOUS-MENU



ALIGNMENT PROCEDURE - PROCESSUS DE REGLAGES - ABGLEICH - VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - PROCEDIMIENTO DE ALINEACION

TUBE	
Return	
Tube type	A66ECY...
Store	<input checked="" type="checkbox"/>
Restore	<input type="checkbox"/>

SETUP	
Return	
Clear Progs.	<input type="checkbox"/>
Kbd. Config.	Default
WSS	<input type="checkbox"/>
Default	<input type="checkbox"/>
Store	<input type="checkbox"/>
Restore	<input type="checkbox"/>

GEOMETRY	
Return	
V-Slope	7C
V-Amplitude	6C
V-Position	<input type="checkbox"/>
Blanking On	7C
S - Correction	54
H-Position	94
H-Amplitude	70
EW-Amplitude	78
EW-Trapezium	98
Default	<input type="checkbox"/>
Store	<input type="checkbox"/>
Restore	<input type="checkbox"/>

VIDEO	PAL	BG
Return	Factory	<input checked="" type="checkbox"/>
Drive Adjust.	<input type="checkbox"/>	
R-Drive	9C	
G-Drive	9C	
B-Drive	9C	
Peak-White	70	
Scale Bright	5C	
Scale Colour	CC	
Scale Contr.	<input type="checkbox"/>	
Default	<input checked="" type="checkbox"/>	
Store	<input checked="" type="checkbox"/>	
Restore	<input type="checkbox"/>	

IF	
Return	
AGC Take Over	<input type="checkbox"/>
FFI - Bit	<input type="checkbox"/>
Default	<input checked="" type="checkbox"/>
Store	<input checked="" type="checkbox"/>
Restore	<input checked="" type="checkbox"/>

TUBE	
Return	Closes the sub-menu and returns to the "Main Service Menu". Press </> on the RCU or VOL+/VOL- on TV front panel.
Tube type	Retourne au menu principal.
Verlassen des Untermenüs,das Hauptmenü	Verlassen des Untermenüs.
Chiu il sottomenu e fa apparire il menu principale Field Service Mode.	Chiu il sottomenu e fa apparire il menu principale Field Service Mode.
Cierra el submenú. El menú Field Service Mode aparece.	Cierra el submenú. El menú Field Service Mode aparece.
Press </>: remote control; Vol. +/- : TV keyb.	Press </>: remote control; Vol. +/- : TV keyb.

SETUP	
Return	Closes the sub-menu and returns to the "Main Service Menu".
Verlassen des Untermenüs	Retourne au menu principal.
Chiu il sottomenu e fa apparire il menu principale Field Service Mode.	Chiu il sottomenu e fa apparire il menu principale Field Service Mode.
Cierra el submenú. El menú Field Service Mode aparece.	Cierra el submenú. El menú Field Service Mode aparece.
Press </>: remote control; Vol. +/- : TV keyb.	Press </>: remote control; Vol. +/- : TV keyb.

GEOMETRY	
Return	Closes the sub-menu and returns to the "Main Service Menu".
Verlassen des Untermenüs	Retourne au menu principal.
Chiu il sottomenu e fa apparire il menu principale Field Service Mode.	Chiu il sottomenu e fa apparire il menu principale Field Service Mode.
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Press </>: remote control; Vol. +/- : TV keyb.	Press </>: remote control; Vol. +/- : TV keyb.

GEOMETRY	
9.Adjust position H.	
9.Regler la position H	
9.Korrigieren Sie Horizontale Lage.	
9.Regolare la posizione H	
9.Ajuste la posición H	
10.Ajuster l'amplitude H	
10.Adjust amplitude H	
10.Korrigieren Sie Horizontal-Amplitude	
10.Regulare l'amplitude H	
10.Ajuste la amplitud H	
11-12.Correction of EW pincushion distortion.	
11-12.Corrrection de cossu EW	
11-12.Korrektur der Ost/West Kissenvverzerrung.	
11-12.Correzione della distorsione a cuscino EW	
11-12.Correción de la distorsión de cojín EW	
13.Correction of corners (Shape).	
13.Correction de coins (Shape)	
13.Correzione degli angoli (Forma)	
13.Correción de esquinas (Shape)	
14.Trapeze / Trapézo	
14.Trapeze- / Trapézo	
14.Trapez-Verzerrung.	
14.Trapezio / Trapézo	
"These adjustments are not necessary for 4:3 tubes in 16:9 mode"	
"Pour les tubes 4/3 en mode 16:9, ces reglages ne sont pas nécessaire"	
"Diese Einstellungen sind nicht für 4:3 Bildröhren im 16:9 Betrieb erforderlich."	
"Queste regolazioni non sono necessarie per tubi 4/3 in modo 16:9"	
"Estos ajustes no son necesarios para los tubos 4/3 en modo 16:9"	
3.Select "Blanking On" line of the menu and ENABLE (tick) the function, the bottom half of the screen will go black.	
3.Postinier dans le mode Service Blanking. On la moitié basse de l'écran devient noire	
3.Schalten Sie den Blanken Mode ein. Die untere Hälfte des Bildschirms wird schwarz.	
3.Posizionarsi in modo Service Blanking on; la parte inferiore dello schermo diventa nera	
3.Pase al modo Service Blanking On. La mitad inferior de la pantalla se vuelve negra.	
4.Select the "V-Slope" line of the menu and adjust its value until the centre line of the pattern is just invisible.	
4.Aligner "Vertical - Slope" pour que la ligne médiane soit à peine non visible	
4.Regeln Sie "V-Slope" so ein, dass die Mittellinie nahezu verschwindet.	
4.Alinee "Vertical Slope" para que la linea media sea casi invisible.	
5.Return to the "Blanking On" line of the menu and DISABLE (un-tick) the function.	
5.Revenir à Blanken On et mettre	
5.Schalten Sie den Blanken Mode wieder ein und	
5.Ritornare in modo Blanking on e porre	
5.Vuelva a "Blanking on" y poner	
6.Switch the test pattern signal to the crossherring geometry pattern.	
6.Positioner la mire de quadrillage	
6.Speisen Sie ein Gittertestbild ein.	
6.Posizionare il monoscopio	
6.Coloque la plantilla cuadrículada.	
7.Perform the geometry adjustments described below.	
7.Effectuer les réglages de géométrie décrits ci-dessous	
7.Nehmen Sie die Geometrieeinstellung wie unten beschrieben vor:	
7.Effettuare le regolazioni di geometria descritte in precedenza	
7.Efectúe los ajustes geométricos descritos más abajo.	
8.Store /Memoriser /Speichern /Memorizzare /Almacene	

VIDEO	PAL
Return	Closes the sub-menu and returns to the "Main Service Menu".
Verlassen des Untermenüs	Retourne au menu principal.
Chiu il sottomenu e fa apparire il menu principale Field Service Mode.	Chiu il sottomenu e fa apparire il menu principale Field Service Mode.
Cierra el submenú. El menú Field Service Mode aparece.	Cierra el submenú. El menú Field Service Mode aparece.
Press </>: remote control; Vol. +/- : TV keyb.	Press </>: remote control; Vol. +/- : TV keyb.

IF	
Return	Closes the sub-menu and returns to the "Main Service Menu".
AGC Take Over	<input type="checkbox"/>
FFI - Bit	<input type="checkbox"/>
Default	<input checked="" type="checkbox"/>
Store	<input checked="" type="checkbox"/>
Restore	<input checked="" type="checkbox"/>

TUBE type	
After replacing the NVM, the correct tube type number must be entered (6 characters).	
Once entered, the tubes geometry and video default values are immediately activated.	
Variable geometry and video parameters are written to the NVM when the "STORE" line is selected.	
See table below for tube type numbers.	
Definit le tube exact après changement de NVM.	
Les nouvelles valeurs de tubes (avec video et géométrie) sont actives de suite.	
Les paramètres de vidéo et de géométrie sont chargés en NVM lorsque STORE est sélectionné. Voir liste ci-dessous.	
Nach Tausch des NVM den bildröhrentyp (6 Ziffern) auswählen. Die neuen Geometrie- und Video-defaultwerte werden sofort aktiv. Variable Geometrie- und Videoewerte werden durch Speichern mit "STORE" ins NVM geschrieben. Bildröhraufstellung : siehe unten.	
Scegliere il tubo appropriato dopo aver sostituito la NVM; i 6 caratteri che indicano il nuovo tipo di tubo, richiamano i valori video e geometria di default. I parametri per video e geometria vengono caricati nella NVM	

active-aktiv	<input checked="" type="checkbox"/>
No active-inaktiv	<input type="checkbox"/>
Kbd. Config	
Factory adjusted	
Reserve au réglage usine	
Reserviert für fabrikinstellungen	
Riservato alla regolazione di fabbrica	
Kbd. Config	<input type="checkbox"/>
Default	

WSS	Automatic detection of DOLBY surround sound and 16/9 Format pictures via Teletext line number 23 is valid on all programmes.
Sélection du process WSS valid pour tous programmes	
WSS (nur bei 16:9 oder Dolby)	Auswertung der Zelle 23 zur automatischen Format umschaltung und Dolby umschaltung
Identificación "auto-surround" e "format" a través de la línea 23 de Teletext. La selección del procesamiento WSS es válida para todos los programas.	
Detección "auto-surround" y "format" a través de la línea 23 de Teletext. La selección del procesamiento WSS es válida para todos los programas.	
<input checked="" type="checkbox"/> detect.enable- aktiv	<input type="checkbox"/> disable-inaktiv

V-Amplitude	
V-Position	
H-Position	
S-Correction	
H-Amplitude	
EW - Amplitude	
EW - Trapezium	
EW - Shape	

Correct	
incorrect	
→ After setting	<input type="checkbox"/>
→ Store (+)	<input checked="" type="checkbox"/>

Tube Name	LIST name	Description
A51EFS83X191	A51EFS	4:3-21° OT: AK-Mask: Ccty-M
A59EHJ43X15	A59EHJ	4:3-25° MP: AK-Mask: Vector
A66EHJ43X15	A66EHJ	4:3-28° MP: AK-Mask: Vector
A68EGD039X30	A68EGD	4:3-29° SF: Inv-Mask: Vector
A90AEJ13X01	A90AEJ	4:3-33° MP: AK-Mask: Ccty-M
A90EGD049X30	A90EGD	4:3-25° SF: Inv-Mask: Vector
A68AGA25X01	A68AGA	4:3-29° VHP: AK-Mask: Ccty-M
W56EGV023X015	W56EGV	16:9-24° SF: Inv-Mask: Vector
W66EGV023X015	W66EGV	16:9-28° SF: Inv-Mask: Vector
W76EGV023X015	W76EGV	16:9-32° SF: Inv-Mask: Vector

GEOMETRY MODE ALIGNMENT

4/3 picture tube

Signal : 4/3 test pattern

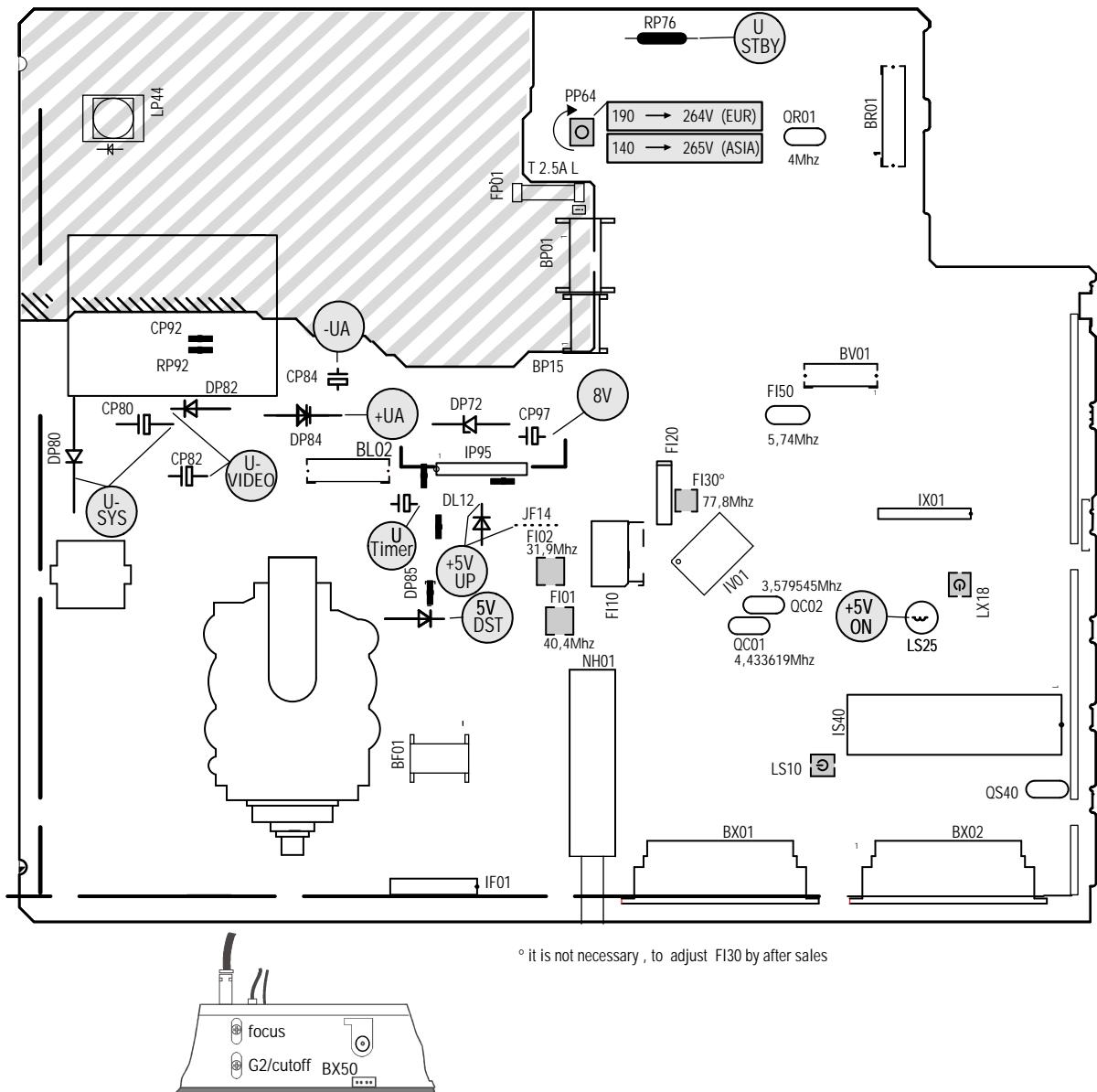
4 / 3 standard mode zoom 0		overscan V=107%, H=107% 1- Adjust Vertical position and Vertical amplitude 2- Adjust Vertical Blanking and linearity
→ After setting	<input type="checkbox"/>	
→ Store (+)	<input checked="" type="checkbox"/>	
4/3		overscan V=120%, H=120% 3- Adjust Horizontal position and Horizontal amplitude
→ After setting	<input type="checkbox"/>	
→ Store (+)	<input checked="" type="checkbox"/>	
16 / 9 standard mode zoom 0		Adjust the vertical height until V = 80%
→ After setting	<input type="checkbox"/>	
→ Store (+)	<input checked="" type="checkbox"/>	
16 / 9 standard mode zoom 1		Adjust the vertical height : V =90%
→ After setting	<input type="checkbox"/>	
→ Store (+)	<input checked="" type="checkbox"/>	

16/9 picture tube

Signal : 4/3 test pattern

16 / 9 standard mode zoom 0		overscan V=107%, H =107% 1- Adjust Vertical position and Vertical amplitude 2- Adjust Vertical Blanking and linearity
→ After setting	<input type="checkbox"/>	
→ Store (+)	<input checked="" type="checkbox"/>	
16 / 9		3- Adjust Horizontal position and Horizontal amplitude
→ After setting	<input type="checkbox"/>	
→ Store (+)	<input checked="" type="checkbox"/>	

LOCATION OF CONTROLS - EMPLACEMENT DES REGLAGES - SERVICE LAGEPLAN - POSIZIONE REGOLATORI DI SERVIZIO - SITUACIÓN DE LOS AJUSTES

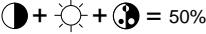
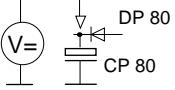
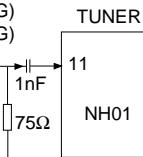
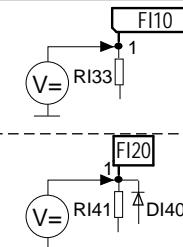
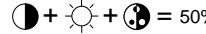
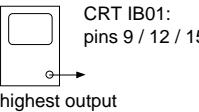
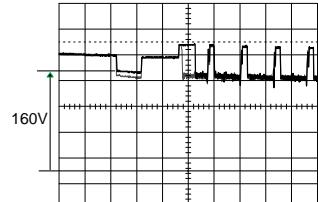


Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello châssis collegata alla rete.
Parte del chassís conectada a la red.



- Use isolating mains transformer -
- Utiliser un transformateur isolateur du secteur -
- Trenntrafo verwenden -
- Utilizar un transformador aislador de red -
- Utilizzare un trasformatore per isolarsi dalla rete

ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES

U Sys	PP 64			<table border="1"> <thead> <tr> <th>Tube</th><th>Format</th><th>Usys</th><th>Jumper</th><th>RL65</th></tr> </thead> <tbody> <tr><td>A51EFS83X191</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A59EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr><td>A66EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr><td>A59EGDD48X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A68EGDD38X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A68AGA25X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A80AEJ15X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>W56EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr><td>W66EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr><td>W76EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> </tbody> </table>	Tube	Format	Usys	Jumper	RL65	A51EFS83X191	4:3	126V+/-0,5V	JL80	4k7	A59EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A66EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A59EGDD48X30	4:3	126V+/-0,5V	JL80	4k7	A68EGDD38X30	4:3	126V+/-0,5V	JL80	4k7	A68AGA25X01	4:3	126V+/-0,5V	JL80	4k7	A80AEJ15X01	4:3	126V+/-0,5V	JL80	4k7	W56EGV023X015	16:9	138V+/-0,5V	JL82	47k	W66EGV023X015	16:9	138V+/-0,5V	JL82	47k	W76EGV023X015	16:9	138V+/-0,5V	JL82	47k
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IF Alignment Alignment FI	trap 40,4Mhz FI 01 trap 31,9Mhz FI 02	<p>Switch set to standard BG Commuter le TV au standard BG</p> <p>IF Signal 40,4MHz (BG) 31,9MHz (BG)</p> 		<p>Adjust FI01 for minimum value at 40,4Mhz</p> <p>Adjust FI20 for minimum value at 31,9Mhz</p>																																																							
U G2 / cutoff	SCREEN	 <p>AV (no Signal, black screen)</p>																																																									
FOCUS	FOCUS LL05	 <p>Test pattern (standard values)</p>		Sharp picture																																																							

I - EIN-AUSTIEG SERVICE MODE - ACCESSO/USCITA ALLA/DALLA FUNZIONE

I EINSTIEG IN DEN SERVICE MODE

Zugriff über die Tastatur des Fernsehgeräts

- Mit der Fernbedienung das Fernsehgerät in Stand-by schalten. Das Gerät mit dem Netzschalter ausschalten (warten bis LED dunkel ist)
- Gleichzeitig die Tasten **PR-** und **VOL-** drücken und den TV über die EIN/AUS-Taste einschalten.
- Die Tasten **PR-** und **VOL-** (8s) gedrückt halten.

Soft-Ver. V1.00-0 0080
 Config. A5- - -N
 Serial-No. 103465071

▷ QUIT
 TUBE
 SETUP
 GEOMETRY
 VIDEO
 IF

Anmerkung :

Im SERVICE MODE :

- wird die Sperrfunktion (PIN-Nummer) ignoriert und die Kindersicherung gelöscht (reinitialisiert).
- werden alle Ein- und Ausschaltzeitgeber gelöscht.
- wird die SCART - Schaltspannung ignoriert.
- werden AV- Link WSS, EPG und Teletext gesperrt
- wird die automatische Abschaltung bei fehlendem Antennensignal gesperrt.
- werden Kontrast, Farbe und Helligkeit auf Standardwerte gesetzt.
- wird die Bildschärfe auf Mittelstellung (nominal) gesetzt.
- wird der Kontrast-Expander auf "gering.." gesetzt.
- wird das Standardformat bzw. der Standard-Zoom modus gewählt.

I ACCESSO AL SERVICE MODE

tramite i comandi del televisore

- Commutare il televisore in stand-by con il telecomando. Spegnere l'apparecchio con l'interruttore di rete (attendere finché il LED è spento)
- Tenere premuti i tasti **PR-** e **VOL-** accendendo il TV con il pulsante ON/OFF.
- Premere i pulsanti **PR -** e **VOL -** (8s).

Soft-Ver. V1.00-0 0080
 Config. A5- - -N
 Serial-No. 103465071

▷ QUIT
 TUBE
 SETUP
 GEOMETRY
 VIDEO
 IF

Nota :

Nel service mode:

- la funzione Blocco (Numero Pin) viene ignorata e la funzione Blocco Bambini è reinizializzata.
- Cancello la programmazione sveglia
- Il piedino 8 della scart deve essere ignorato.
- I riconoscimenti AV-Link WSS, EPG e televideo non sono abilitati.
- Nel caso di mancanza di segnale d'antenna, la funzione automatica di standby è disabilitata.
- Contrasto, colore, luminosità : regolazioni di fabbrica.
- Nitidezza: media (nominale)
- L'espansore contrasto è a livello basso.
- Zoom e formato a livello.

2 VORÜBERGEHENDES VERLASSEN DES SERVICE MODE

2 USCITA TEMPORANEA DAL SERVICE MODE

- Auf der Fernbedienung EXIT drücken.
- Mit der Taste Menü gelangen Sie zum Menü Übersicht

- Mit der blauen Taste gelangen sie zum Service-Menü.

- Premere Exit sul telecomando.
- Al menu di uso quotidiano si accede attraverso il pulsante Menu.

- È possibile rientrare nel Menu Field Service attraverso il pulsante Blu.

3 ENDGÜLTIGES VERLASSEN DES SERVICE MODE

3 USCIRE DAL SERVICE MODE

Fernbedienung TV-Bedienfeld EIN/Aus - Taste

- Wenn der Zeiger im Hauptmenü des Service-Modus auf BEENDEN steht
- Mit Standby-Funktion oder EIN/AUS - taste ausschalten

- Taste «<», «OK» oder «>» drücken -Taste «VOL+» drücken

- TV Modus

Werte und Einstellungen, die nicht vor dem Verlassen des Service-Modus gespeichert wurden, werden nicht in den Permanentsspeicher übernommen

telecomando Pannello controllo TV Tasto on/off o standby

- Andare al punto QUIT nel Modo Field service del Menu principale
- Funzione Stand-by o «off» con il tasto on/off

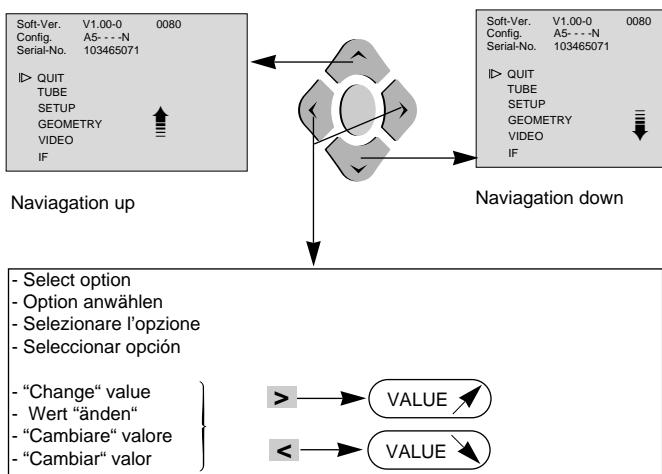
- Premere «<», «OK» o «>» - Premere «VOL.+»

- Modo TV.

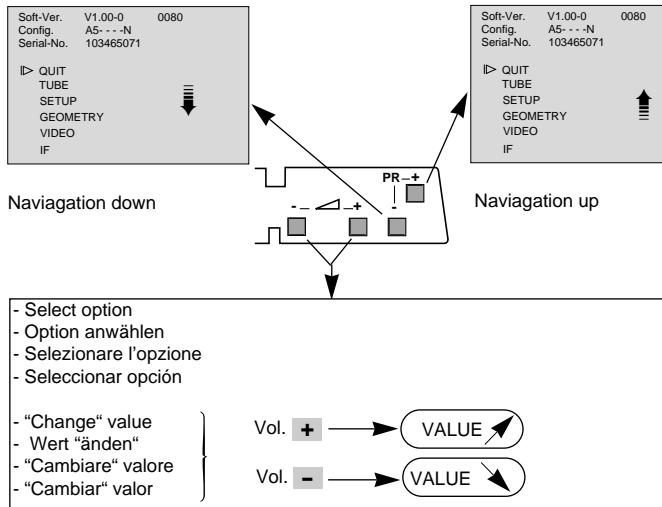
I Valori e regolazioni non memorizzate prima di uscire dal Service Mode. Non vengono scritti nella NVM

II - NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE FUNCTIONS WALLIN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO

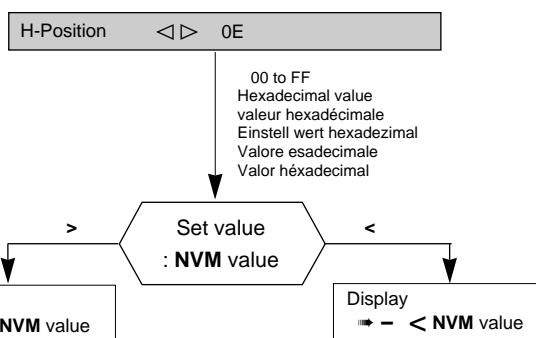
I REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG TELECOMANDO - MANDO A DISTANCIA



2 TV CONTROL PANEL - CLAVIER TV - TASTATUR DES FERNSEHGERÄTS - COMANDI DEL TELEVISORE -



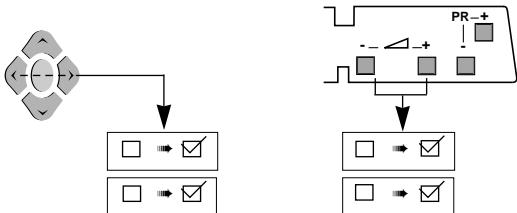
3 DISPLAYING THE VALUE OF THE SETTING - AFFICHAGE DES VALEURS - ANZEIGE DES EINSTELL WERTS VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - VISUALIZACION DEL VALOR DE AJUSTE



4 TOGGLE FUNCTIONS - VALIDATION DES FONCTIONS EIN-UND AUSSCHALT FUNKTIONEN - FUNZIONI DI COMMUTAZIONE - FUNCION CONMUTACION

To enable a function check (tick) the box.
Pour valider une fonction cocher la case correspondante
Zum Implementieren einer Funktion das Kontrollkästchen aktivieren (ankreuzen)
Per implementare una funzione di verifica, (vistare) la casella
Para poner en funcionamiento una función verifique (señale) la casilla

: Enable function : Disable function



5 STORING VALUES IN MEMORY - MEMORISATION DES VALEURS - SPEICHERN DER WERTE - MEMORIZZAZIONE I VALORI - VALORES ALMACENADOS EN LA MEMORIA

After setting, the values are stored in NVM.
Après réglages les valeurs sont mémorisées en NVM.
Nach dem Einstellen werden die Werte im NVM gespeichert.
Dopo la regolazione i valori vengono memorizzati in NVM.
Después del ajuste, los valores son almacenados en NVM

The box becomes

During alignment, values are temporarily stored in RAM.
En cours d'alignement les valeurs sont mémorisées temporairement en RAM.
Während des Abgleichs werden die Werte vorübergehend im RAM gespeichert.
Durante l'allineamento i valori vengono memorizzati provisoriamente sulla RAM.
Durante el ajuste, los valores son almacenados temporalmente en RAM.

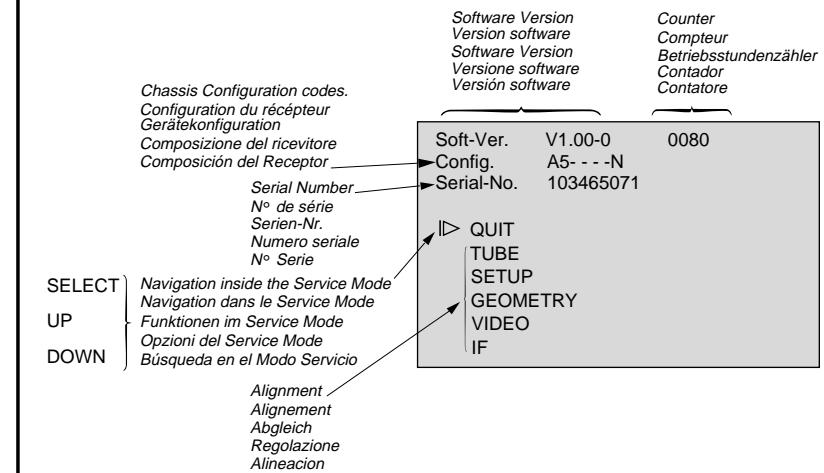
Store \Rightarrow Copies RAM values into NVM
Copie la valeur RAM en NVM
Kopieren des Werts von RAM nach NVM
Copiare i valori RAM in NVM
Copiar valores RAM en NVM

Restore \Rightarrow Copies all values from NVM into RAM.
Copie toutes les valeurs des données NVM en RAM
Kopiert alle NVM-Datenwerte in den RAM
Copiare tutti i valori da NVM sulla RAM
Copiar todos los valores de NVM a RAM

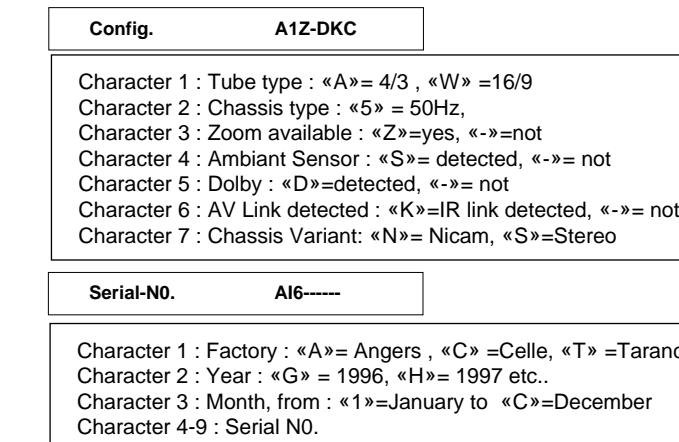
ROM Default \Rightarrow All the default values of a page in use are stored in RAM.
L'ensemble des valeurs par défaut d'une page courante est chargé en RAM.
Sämtliche Standardwerte der aktuellen Seite werden im RAM geladen.
Tutti i valori di default di una pagina in uso vengono memorizzati sulla RAM.
Todos los valores por defecto de la página en curso están almacenados en RAM.

III - LITE-MENU FOR FIELD SERVICE MODE - MENUS DU MODE SERVICE

I MAIN MENU - MENU PRINCIPAL



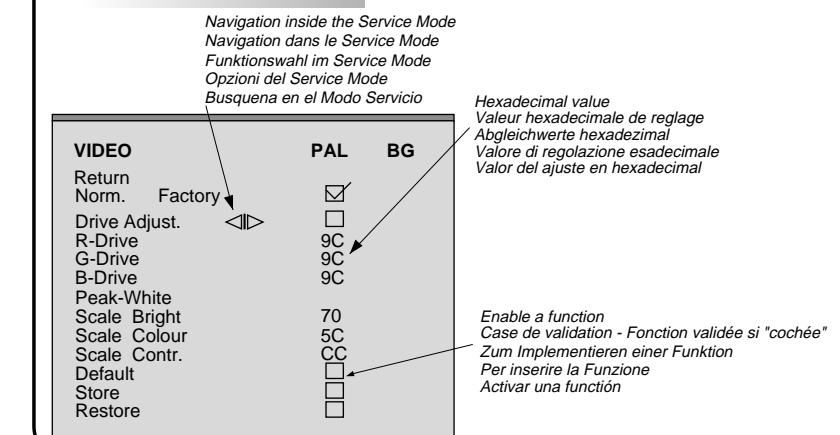
TV CONFIGURATION - CONFIGURATION DU TV - GERÄTEKONFIGURATION - CONFIGURAZIONE DEL TV - CONFIGURACIÓN DEL TV



TIME COUNTER - COMPTEUR DE TEMPS - BETRIEBSSTUNDENZÄHLER - CONTATORE - CONTADOR

The counter indicates the TV's number of service hours. It counts from 0 to 65535 hours.
The display is hexadecimal.
Le compteur indique le nombre d'heures de service du TV. Il compte de 0 à 65535 heures. L'affichage est en hexadécimal.
Der Zähler zeigt an, wieviele Stunden der Fernseher in Betrieb ist. Die Anzeige ist hexadecimale.
Il contatore indica il numero di ore di servizio del TV. Puo' contatore da 0 a 65535. La visualizzazione è esadecimale.
El contador indica el número de horas de servicio de la TV. Cuenta de 0 a 65535 horas. El visualizador es hexadecimal.

2 SUBMENU - SOUS-MENU



ALIGNMENT PROCEDURE - PROCESSUS DE REGLAGES - ABGLEICH - VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - PROCEDIMIENTO DE ALINEACION

TUBE	
Return	
Tube type	A66ECY...
Store	<input checked="" type="checkbox"/>
Restore	<input type="checkbox"/>

SETUP	
Return	
Clear Progs.	<input type="checkbox"/>
Kbd. Config.	Default
WSS	<input type="checkbox"/>
Default	<input type="checkbox"/>
Store	<input type="checkbox"/>
Restore	<input type="checkbox"/>

GEOMETRY	
Return	
V-Slope	7C
V-Amplitude	6C
V-Position	<input type="checkbox"/>
Blanking On	7C
S - Correction	54
H-Position	94
H-Amplitude	70
EW-Amplitude	78
EW-Trapezium	98
Default	<input type="checkbox"/>
Store	<input type="checkbox"/>
Restore	<input type="checkbox"/>

VIDEO	PAL	BG
Return	Factory	<input checked="" type="checkbox"/>
Drive Adjust.	<input type="checkbox"/>	
R-Drive	9C	
G-Drive	9C	
B-Drive	9C	
Peak-White	70	
Scale Bright	5C	
Scale Colour	CC	
Scale Contr.	<input type="checkbox"/>	
Default	<input checked="" type="checkbox"/>	
Store	<input checked="" type="checkbox"/>	
Restore	<input type="checkbox"/>	

IF	
Return	
AGC Take Over	<input type="checkbox"/>
FFI - Bit	<input type="checkbox"/>
Default	<input checked="" type="checkbox"/>
Store	<input checked="" type="checkbox"/>
Restore	<input checked="" type="checkbox"/>

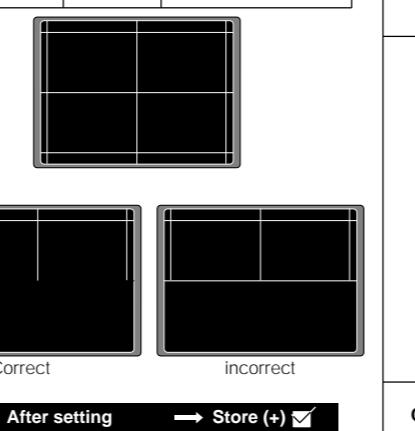
TUBE	
Return	Closes the sub-menu and returns to the "Main Service Menu". Press </> on the RCU or VOL+/VOL- on TV front panel.
Tube type	Retourne au menu principal.
Verlassen des Untermenüs,das Hauptmenü	Verlassen des Untermenüs.
Chiu il sottomenu e fa apparire il menu principale Field Service Mode.	Chiu il sottomenu e fa apparire il menu principale Field Service Mode.
Cierra el submenú. El menú Field Service Mode aparece.	Cierra el submenú. El menú Field Service Mode aparece.
Press </>: remote control; Vol. +/- : TV keyb.	Press </>: remote control; Vol. +/- : TV keyb.

SETUP	
Return	Closes the sub-menu and returns to the "Main Service Menu".
Verlassen des Untermenüs	Retourne au menu principal.
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Press </>: remote control; Vol. +/- : TV keyb.	Press </>: remote control; Vol. +/- : TV keyb.

GEOMETRY	
9.Adjust position H.	
9.Regler la position H	
9.Korrigieren Sie Horizontale Lage.	
9.Regolare la posizione H	
9.Ajuste la posición H	
10.Ajuster l'amplitude H	
10.Adjust amplitude H	
10.Korrigieren Sie Horizontal-Amplitude	
10.Regulare l'amplitude H	
10.Ajuste la amplitud H	
11-12.Correction of EW pincushion distortion.	
11-12.Corrrection de cossu EW	
11-12.Korrektur der Ost/West Kissenvverzerrung.	
11-12.Correzione della distorsione a cuscino EW	
11-12.Correción de la distorsión de cojín EW	
13.Correction of corners (Shape).	
13.Correction de coins (Shape)	
13.Correzione degli angoli (Forma)	
13.Correción de esquinas (Shape)	
14.Trapeze. / Trapéze	
14.Trapezio- / Trapéze	
14.Trapezio-Verzerrung.	
14.Trapezio / Trapézo	
"These adjustments are not necessary for 4:3 tubes in 16:9 mode"	
"Pour les tubes 4/3 en mode 16:9, ces reglages ne sont pas nécessaire"	
"Diese Einstellungen sind nicht für 4:3 Bildröhren im 16:9 Betrieb erforderlich."	
"Queste regolazioni non sono necessarie per tubi 4/3 in modo 16:9"	
"Estos ajustes no son necesarios para los tubos 4/3 en modo 16:9"	
3.Select "Blanking On" line of the menu and ENABLE (tick) the function, the bottom half of the screen will go black.	
3.Postinier dans le mode Service Blanking. On la moitié basse de l'écran devient noire	
3.Schalten Sie den Blanken Mode ein. Die untere Hälfte des Bildschirms wird schwarz.	
3.Posizionarsi in modo Service Blanking on; la parte inferiore dello schermo diventa nera	
3.Pase al modo Service Blanking On. La mitad inferior de la pantalla se vuelve negra.	
4.Select the "V-Slope" line of the menu and adjust its value until the centre line of the pattern is just invisible.	
4.Aligner "Vertical - Slope" pour que la ligne médiane soit à peine non visible	
4.Regeln Sie "V-Slope" so ein, dass die Mittellinie nahezu verschwindet.	
4.Alinee "Vertical Slope" para que la linea media sea casi invisible.	
5.Return to the "Blanking On" line of the menu and DISABLE (un-tick) the function.	
5.Revenir à Blanken On et mettre	
5.Schalten Sie den Blanken Mode wieder ein und	
5.Ritornare in modo Blanking on e porre	
5.Vuelva a "Blanking on" y poner	
6.Switch the test pattern signal to the crossherring geometry pattern.	
6.Positioner la mire de quadrillage	
6.Speisen Sie ein Gittertestbild ein.	
6.Posizionare il monoscopio	
6.Coloque la plantilla cuadrículada.	
7.Perform the geometry adjustments described below.	
7.Effectuer les réglages de géométrie décrits ci-dessous	
7.Nehmen Sie die Geometrieeinstellung wie unten beschrieben vor:	
7.Effettuare le regolazioni di geometria descritte in precedenza	
7.Efectúe los ajustes geométricos descritos más abajo.	
8.Store /Memoriser /Speichern /Memorizzare /Almacene	

WSS	Automatic detection of DOLBY surround sound and 16/9 Format pictures via Teletext line number 23 is valid on all programmes.
Sélection du process WSS valid pour tous programmes	
WSS (nur bei 16:9 oder Dolby)	Auswertung der Zelle 23 zur automatischen Format umschaltung und Dolby umschaltung
Identification "auto-surround" e "format" tramite il televisore, decodificando la riga 23. La selezione di WSS è valida per tutti i programmi.	
Detección "auto-surround" y "format" a través de la línea 23 de Teletext. La selección del procesamiento WSS es válida para todos los programas.	
<input checked="" type="checkbox"/> detect.enable- aktiv	<input type="checkbox"/> disable-inaktiv



Correct Incorrect

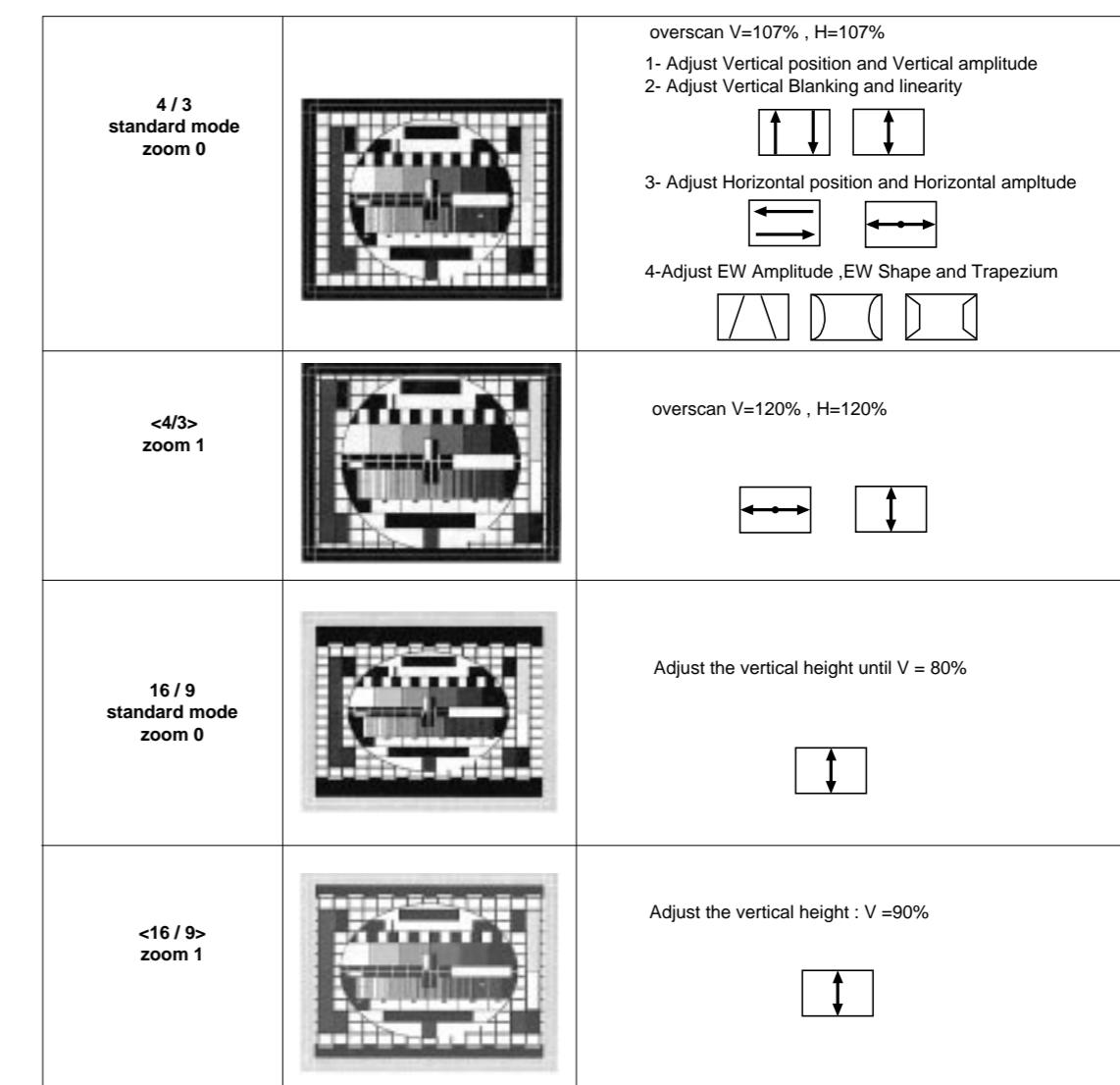
VIDEO	PAL	BG
Return	Factory	<input checked="" type="checkbox"/>
Drive Adjust.	<input type="checkbox"/>	
R-Drive	9C	
G-Drive	9C	
B-Drive	9C	
Peak-White	70	
Scale Bright	5C	
Scale Colour	CC	
Scale Contr.	<input type="checkbox"/>	
Default	<input checked="" type="checkbox"/>	
Store	<input checked="" type="checkbox"/>	
Restore	<input type="checkbox"/>	

IF	
Return	
AGC Take Over	<input type="checkbox"/>
FFI - Bit	<input type="checkbox"/>
Default	<input checked="" type="checkbox"/>
Store	<input checked="" type="checkbox"/>
Restore	<input checked="" type="checkbox"/>

GEOMETRY MODE ALIGNMENT

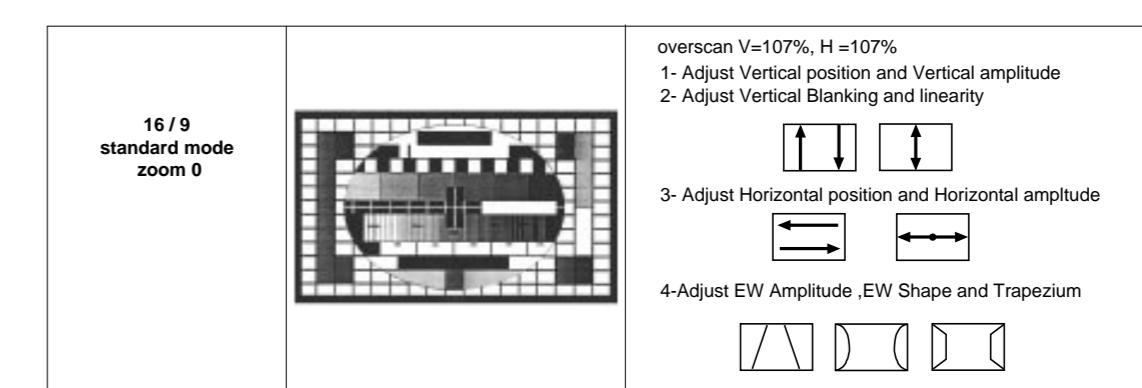
4/3 picture tube

Signal : 4/3 test pattern

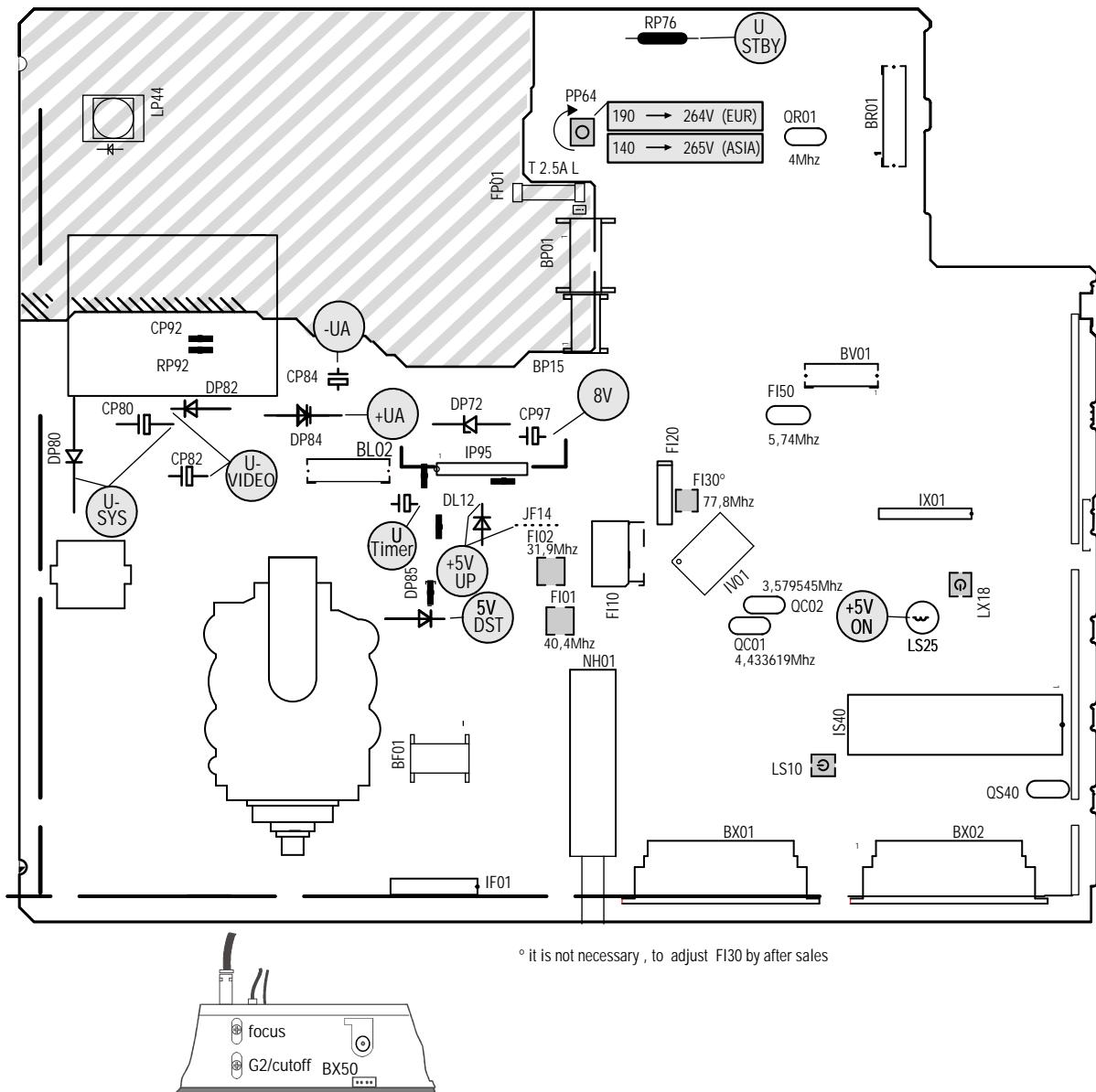


16/9 picture tube

Signal : 4/3 test pattern



LOCATION OF CONTROLS - EMPLACEMENT DES REGLAGES - SERVICE LAGEPLAN - POSIZIONE REGOLATORI DI SERVIZIO - SITUACIÓN DE LOS AJUSTES

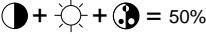
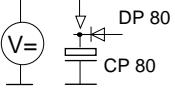
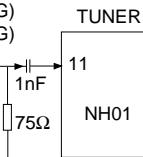
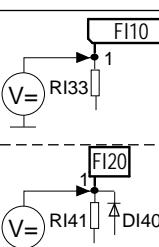
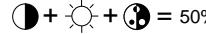
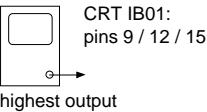
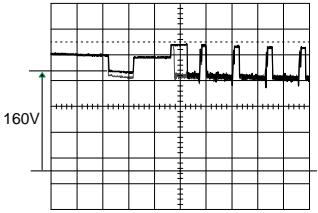


Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello châssis collegata alla rete.
Parte del chassís conectada a la red.



- Use isolating mains transformer -
- Utiliser un transformateur isolateur du secteur -
- Trenntrafo verwenden -
- Utilizar un transformador aislador de red -
- Utilizzare un trasformatore per isolarsi dalla rete

ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES

U Sys	PP 64			<table border="1"> <thead> <tr> <th>Tube</th><th>Format</th><th>Usys</th><th>Jumper</th><th>RL65</th></tr> </thead> <tbody> <tr><td>A51EFS83X191</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A59EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr><td>A66EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr><td>A59EGDD48X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A68EGDD38X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A68AGA25X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A80AEJ15X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>W56EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr><td>W66EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr><td>W76EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> </tbody> </table>	Tube	Format	Usys	Jumper	RL65	A51EFS83X191	4:3	126V+/-0,5V	JL80	4k7	A59EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A66EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A59EGDD48X30	4:3	126V+/-0,5V	JL80	4k7	A68EGDD38X30	4:3	126V+/-0,5V	JL80	4k7	A68AGA25X01	4:3	126V+/-0,5V	JL80	4k7	A80AEJ15X01	4:3	126V+/-0,5V	JL80	4k7	W56EGV023X015	16:9	138V+/-0,5V	JL82	47k	W66EGV023X015	16:9	138V+/-0,5V	JL82	47k	W76EGV023X015	16:9	138V+/-0,5V	JL82	47k
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IF Alignment Alignment FI	trap 40,4Mhz FI 01 trap 31,9Mhz FI 02	<p>Switch set to standard BG Commuter le TV au standard BG</p> <p>IF Signal 40,4MHz (BG) 31,9MHz (BG)</p> 		<p>Adjust FI01 for minimum value at 40,4Mhz</p> <p>Adjust FI20 for minimum value at 31,9Mhz</p>																																																							
U G2 / cutoff	SCREEN	 <p>AV (no Signal, black screen)</p>																																																									
FOCUS	FOCUS LL05	 <p>Test pattern (standard values)</p>		Sharp picture																																																							

MODO SERVICIO

E

I - ENTRADA/SALIDA MODO SERVICIO

I ACCESO AL MODO SERVICIO

Acceso con panel control TV

- Con el mando a distancia conectar a STANDBY el televisor. Desconectar el aparato con el interruptor de la red (esperar hasta que el LED se apague).
- Pulse los botones PR - y VOL - y sin soltarlos, pulsar la tecla MARCHA:PARADA.
- Libere los botones PR - y VOL - (8S).

Soft-Ver. V1.00-0 0080
Config. A5---N 103465071
ID> QUIT
TUBE
SETUP
GEOMETRY
VIDEO
IF

Nota :

En modo servicio:

- Se ignora la función de bloqueo y se inicializa la función "cerradura niños".
- Anula todas las horas programadas
- La pautilla 8 del SCART es ignorada
- La detección WSS AV Link, EPG, y Teletext son desactivados.
- El apagado automático en caso de ausencia de señal de antena es desactivado.
- El contraste, color y brillo son puestos a los valores de fábrica.
- La nitidez es puesta al punto medio.
- La expansión de contraste al nivel bajo
- Modo Instalación es desactivado.
- Zoom y formato ignorados.

2 SALIDA TEMPORAL DEL MODO SERVICIO

- Pulse Salir en el mando a distancia
- Con el botón Menu puede acceder al menú de uso cotidiano.

Puede entrar al Menú Servicio con el botón azul.

3 SALIDA DEL MODO SERVICIO

telecomando Panel de control TV Tecla on/off de

- Vaya al punto QUIT del menú principal de modo Servicio
- Función Stand-by o desconexión (off) con tecla on/off.

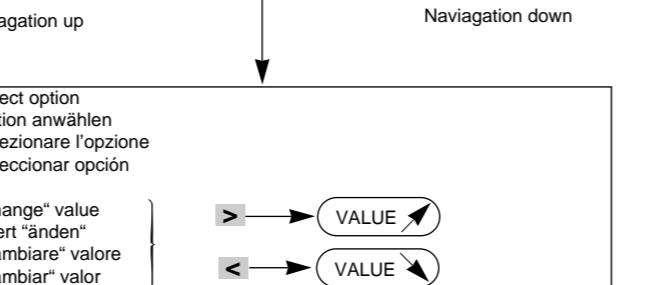
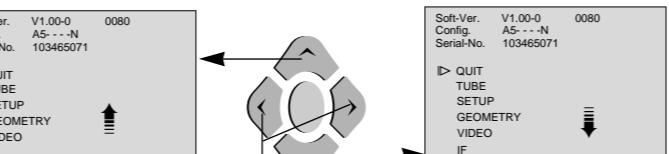
Pulse el botón «<», «OK» o «>»

Pulse el botón «VOL.+»

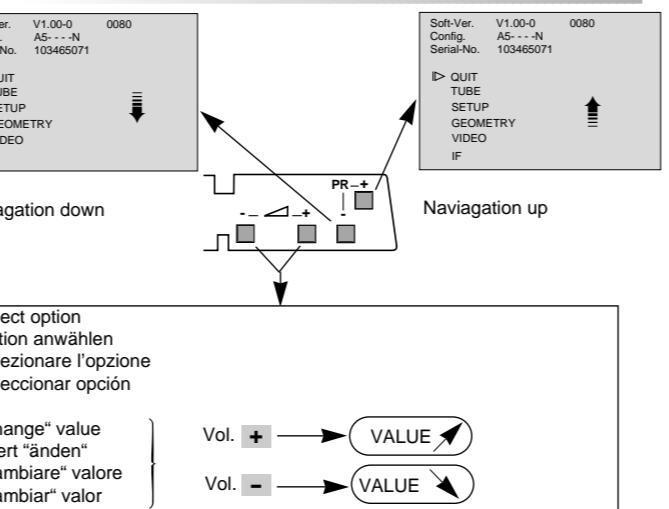
Modo TV.
Los valores o ajustes no se guardan antes de salir del modo servicio y no se escriben en la NVM

II - NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE FUNCTIONS WALLIN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO

I REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG TELECOMANDO - MANDO A DISTANCIA

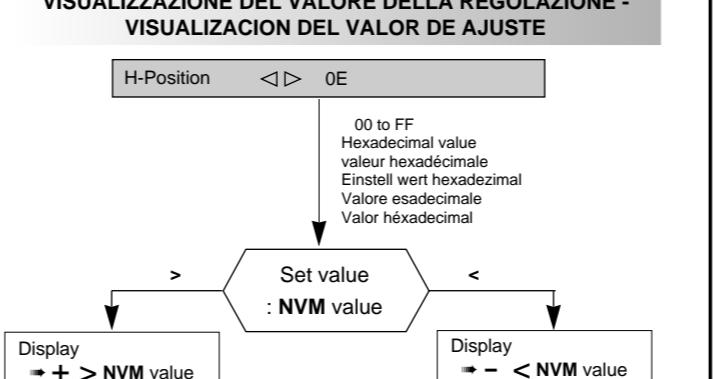


2 TV CONTROL PANEL - CLAVIER TV - TASTATUR DES FERNSEHGERÄTS - COMANDI DEL TELEVISORE -

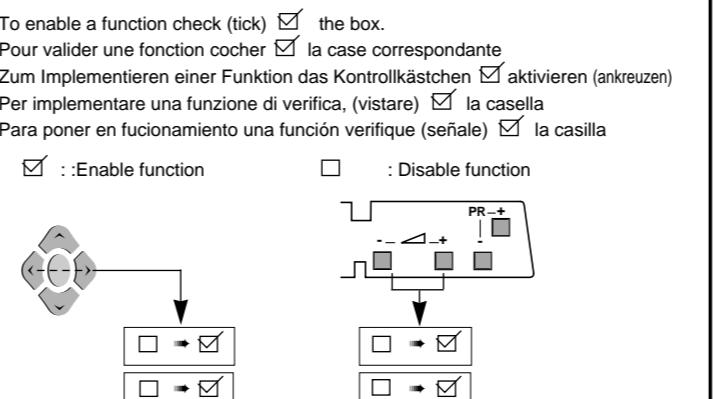


3 DISPLAYING THE VALUE OF THE SETTING - AFFICHAGE DES VALEURS - ANZEIGE DES EINSTELL WERTS VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - VISUALIZACION DEL VALOR DE AJUSTE

4 TOGGLE FUNCTIONS - VALIDATION DES FONCTIONS EIN-UND AUSSCHALT FUNKTIONEN - FUNZIONI DI COMMUTAZIONE - FUNCION COMUTACION



5 STORING VALUES IN MEMORY - MEMORISATION DES VALEURS - SPEICHERN DER WERTE - MEMORIZZAZIONE DEI VALORI - VALORES ALMACENADOS EN LA MEMORIA



After setting, the values are stored in NVM.
Après réglages les valeurs sont mémorisées en NVM.
Nach dem Einstellen werden die Werte im NVM gespeichert.
Dopo la regolazione i valori vengono memorizzati in NVM.
Después del ajuste, los valores son almacenados en NVM

The box becomes
During alignment, values are temporarily stored in RAM.
En cours d'alignement les valeurs sont mémorisées temporairement en RAM.
Während des Abgleichs werden die Werte vorübergehend im RAM gespeichert.
Durante l'allineamento i valori vengono memorizzati provisoriamente sulla RAM.
Durante el ajuste, los valores son almacenados temporalmente en RAM.

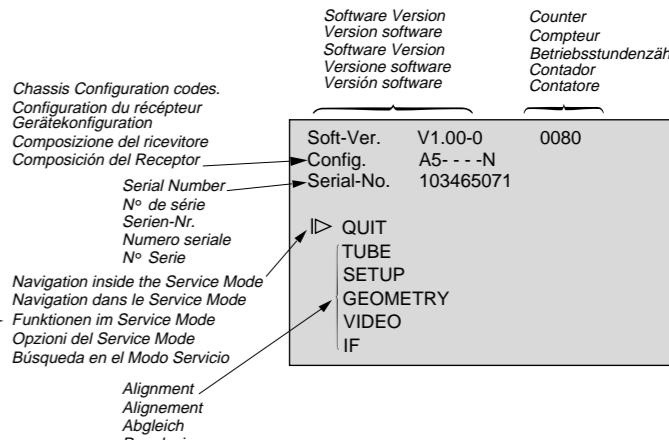
Store Copies RAM values into NVM
Copie la valeur RAM en NVM
Kopieren des Werts von RAM nach NVM
Copiare i valori RAM in NVM
Copiar valores RAM en NVM

Restore Copies all values from NVM into RAM.
Copie toutes les valeurs des données NVM en RAM
Kopieren alle NVM-Datenwerte in den RAM
Copiare tutti i valori da NVM sulla RAM
Copiar todos los valores de NVM a RAM

ROM Default All the default values of a page in use are stored in RAM.
L'ensemble des valeurs par défaut d'une page courante est chargé en RAM.
Sämtliche Standardwerte der aktuellen Seite werden im RAM geladen.
Tutti i valori di default di una pagina in uso vengono memorizzati sulla RAM.
Todos los valores por defecto de la página en curso están almacenados en RAM.

III - LITE-MENU FOR FIELD SERVICE MODE - MENUS DU MODE SERVICE

I MAIN MENU - MENU PRINCIPAL



TV CONFIGURATION - CONFIGURATION DU TV - GERÄTEKONFIGURATION - CONFIGURACION DEL TV - CONFIGURACIÓN DEL TV

Config. A1Z-DKC

- Character 1 : Tube type : «A»=4/3, «W»=16/9
- Character 2 : Chassis type : «5» = 50Hz,
- Character 3 : Zoom available : «Z»=yes, «-»=not
- Character 4 : Ambiant Sensor : «S»= detected, «-»= not
- Character 5 : Dolby : «D»=detected, «-» = not
- Character 6 : AV Link detected : «K»=IR link detected, «-» = not
- Character 7 : Chassis Variant: «N»= Nicam, «S»=Stereo

Serial-NO. A16-----

- Character 1 : Factory : «A»= Angers , «C» =Celle, «T» =Tarancon
- Character 2 : Year : «G» = 1996, «H»= 1997 etc.
- Character 3 : Month, from : «1»=January to «C»=December
- Character 4-9 : Serial NO.

TIME COUNTER - COMPTEUR DE TEMPS - BETRIEBSSTUNDENZÄHLER - CONTATORE - CONTADOR

The counter indicates the TV's number of service hours. It counts from 0 to 65535 hours.

The display is hexadecimal.

Le compteur de temps indique le nombre d'heures de service du TV. Il compte de 0 à 65535 heures.

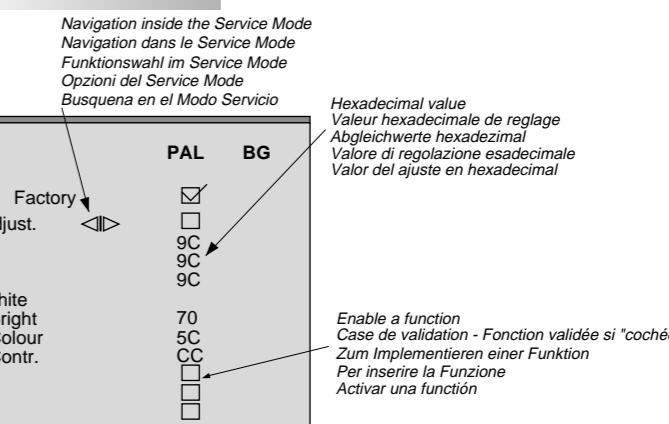
L'affichage est en hexadécimal.

Der Zähler zeigt an, wieviele Stunden der Fernseher in Betrieb ist. Die Anzeige ist hexadecimale.

Il contatore indica il numero di ore di servizio del TV. Puo' contare da 0 a 65535. La visualizzazione è esadecimale.

El contador indica el número de horas de servicio de la TV. Cuenta de 0 a 65535 horas. El visualizador es hexadecimal.

2 SUBMENU - SOUS-MENU



ALIGNMENT PROCEDURE - PROCESSUS DE REGLAGES - ABGLEICH - VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - PROCEDIMIENTO DE ALINEACION

TUBE	
Return	
Tube type	A66ECY...
Store	<input checked="" type="checkbox"/>
Restore	<input type="checkbox"/>

SETUP	
Return	
Clear Progs.	<input type="checkbox"/>
Kbd. Config.	Default
WSS	<input type="checkbox"/>
Default	<input type="checkbox"/>
Store	<input type="checkbox"/>
Restore	<input type="checkbox"/>

GEOMETRY	
Return	
V-Slope	7C
V-Amplitude	6C
V-Position	<input type="checkbox"/>
Blanking On	7C
S - Correction	54
H-Position	94
H-Amplitude	70
EW-Amplitude	78
EW-Trapezium	98
Default	<input type="checkbox"/>
Store	<input type="checkbox"/>
Restore	<input type="checkbox"/>

VIDEO	PAL	BG
Return	Factory	<input checked="" type="checkbox"/>
Drive Adjust.	<input type="checkbox"/>	
R-Drive	9C	
G-Drive	9C	
B-Drive	9C	
Peak-White	70	
Scale Bright	5C	
Scale Colour	CC	
Scale Contr.	<input type="checkbox"/>	
Default	<input checked="" type="checkbox"/>	
Store	<input checked="" type="checkbox"/>	
Restore	<input type="checkbox"/>	

IF	
Return	
AGC Take Over	<input type="checkbox"/>
FFI - Bit	<input type="checkbox"/>
Default	<input checked="" type="checkbox"/>
Store	<input checked="" type="checkbox"/>
Restore	<input checked="" type="checkbox"/>

TUBE	
Return	Closes the sub-menu and returns to the "Main Service Menu". Press </> on the RCU or VOL+/VOL- on TV front panel.
Tube type	Retourne au menu principal.
Verlassen des Untermenüs,das Hauptmenü	Verlassen des Untermenüs.
Chiu il sottomenu e fa apparire il menu principale Field Service Mode.	Chiu il sottomenu e fa apparire il menu principale Field Service Mode.
Cierra el submenú. El menú Field Service Mode aparece.	Cierra el submenú. El menú Field Service Mode aparece.
Press </>: remote control; Vol. +/- : TV keyb.	Press </>: remote control; Vol. +/- : TV keyb.

SETUP	
Return	Closes the sub-menu and returns to the "Main Service Menu".
Verlassen des Untermenüs	Retourne au menu principal.
Chiu il sottomenu e fa apparire il menu principale Field Service Mode.	Chiu il sottomenu e fa apparire il menu principale Field Service Mode.
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Return	Closes the sub-menu and returns to the "Main Service Menu".
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GEOMETRY	
9.Adjust position H.	
9.Regler la position H	
9.Korrigieren Sie Horizontale Lage.	
9.Regolare la posizione H	
9.Ajuste la posición H	
10.Ajuster l'amplitude H	
10.Adjust amplitude H	
10.Korrigieren Sie Horizontal-Amplitude	
10.Regulare l'amplitude H	
10.Ajuste la amplitud H	
11-12.Correction of EW pincushion distortion.	
11-12.Corrrection de cossu EW	
11-12.Korrektur der Ost/West Kissenvierzerrung.	
11-12.Correzione della distorsione a cuscino EW	
11-12.Correción de la distorsión de cojín EW	
13.Correction of corners (Shape).	
13.Correction de coins (Shape)	
13.Correzione degli angoli (Forma)	
13.Correción de esquinas (Shape)	
14.Trapeze. / Trapéze	
14.Trapezio- / Trapéze	
14.Trapezio-Verzerrung.	
14.Trapezio / Trapézo	
"These adjustments are not necessary for 4:3 tubes in 16:9 mode"	
"Pour les tubes 4/3 en mode 16:9, ces réglages ne sont pas nécessaire"	
"Diese Einstellungen sind nicht für 4:3 Bildröhren im 16:9 Betrieb erforderlich."	
"Queste regolazioni non sono necessarie per tubi 4/3 in modo 16:9"	
"Estos ajustes no son necesarios para los tubos 4/3 en modo 16:9"	
3.Select "Blanking On" line of the menu and ENABLE (tick) the function, the bottom half of the screen will go black.	
3.Postinier dans le mode Service Blanking. On la moitié basse de l'écran devient noire	
3.Schalten Sie den Blanken Mode ein. Die untere Hälfte des Bildschirms wird schwarz.	
3.Posizionarsi in modo Service Blanking on; la parte inferiore dello schermo diventa nera	
3.Pase al modo Service Blanking On. La mitad inferior de la pantalla se vuelve negra.	
4.Select the "V-Slope" line of the menu and adjust its value until the centre line of the pattern is just invisible.	
4.Aligner "Vertical - Slope" pour que la ligne médiane soit à peine non visible	
4.Regeln Sie "V-Slope" so ein, dass die Mittellinie nahezu verschwindet.	
4.Alinee "Vertical Slope" para que la linea media sea casi invisible.	
5.Return to the "Blanking On" line of the menu and DISABLE (un-tick) the function.	
5.Revenir à Blanken On et mettre	
5.Schalten Sie den Blanken Mode wieder ein und	
5.Ritornare in modo Blanking on e porre	
5.Vuelva a "Blanking on" y poner	
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6.Speisen Sie ein Gittertestbild ein.	
6.Posizionare il monoscopio	
6.Coloque la plantilla cuadrículada.	
7.Perform the geometry adjustments described below.	
7.Effectuer les réglages de géométrie décrits ci-dessous	
7.Nehmen Sie die Geometrieeinstellung wie unten beschrieben vor:	
7.Effettuare le regolazioni di geometria descritte in precedenza	
7.Efectúe los ajustes geométricos descritos más abajo.	
8.Store /Memoriser /Speichern /Memorizzare /Almacene	

VIDEO	PAL
Return	Closes the sub-menu and returns to the "Main Service Menu".
Verlassen des Untermenüs	Retourne au menu principal.
Chiu il sottomenu e fa apparire il menu principale Field Service Mode.	Chiu il sottomenu e fa apparire il menu principale Field Service Mode.
Cierra el submenú. El menú Field Service Mode aparece.	Cierra el submenú. El menú Field Service Mode aparece.
Press </>: remote control; Vol. +/- : TV keyb.	Press </>: remote control; Vol. +/- : TV keyb.

IF	
Return	Closes the sub-menu and returns to the "Main Service Menu".
AGC Take Over	<input type="checkbox"/>
FFI - Bit	<input type="checkbox"/>
Default	<input checked="" type="checkbox"/>
Store	<input checked="" type="checkbox"/>
Restore	<input checked="" type="checkbox"/>

WSS	Automatic detection of DOLBY surround sound and 16/9 Format pictures via Teletext line number 23 is valid on all programmes.
Sélection du process WSS valid pour tous programmes	
WSS (nur bei 16:9 oder Dolby)	Auswertung der Zelle 23 zur automatischen Format umschaltung und Dolby umschaltung
Identificación "auto-surround" e "format" a través de la línea 23 de Teletext. La selección del procesamiento WSS es válida para todos los programas.	
Detección "auto-surround" y "format" a través de la línea 23 de Teletext. La selección del procesamiento WSS es válida para todos los programas.	
<input checked="" type="checkbox"/> detect.enable- aktiv	<input type="checkbox"/> disable-inaktiv

Kbd. Config	Factory adjusted
WSS	Automatic detection of DOLBY surround sound and 16/9 Format pictures via Teletext line number 23 is valid on all programmes.
WSS (nur bei 16:9 oder Dolby)	Auswertung der Zelle 23 zur automatischen Format umschaltung und Dolby umschaltung
Identificación "auto-surround" e "format" a través de la línea 23 de Teletext. La selección del procesamiento WSS es válida para todos los programas.	
<input checked="" type="checkbox"/> detect.enable- aktiv	<input type="checkbox"/> disable-inaktiv

Kbd. Config	Default
WSS	Automatic detection of DOLBY surround sound and 16/9 Format pictures via Teletext line number 23 is valid on all programmes.
WSS (nur bei 16:9 oder Dolby)	Auswertung der Zelle 23 zur automatischen Format umschaltung und Dolby umschaltung
Identificación "auto-surround" e "format" a través de la línea 23 de Teletext. La selección del procesamiento WSS es válida para todos los programas.	
<input checked="" type="checkbox"/> detect.enable- aktiv	<input type="checkbox"/> disable-inaktiv

Scal. Brightness	<input checked="" type="checkbox"/>
Scal. Contrast	<input checked="" type="checkbox"/>

Scal. Colour	<input checked="" type="checkbox"/>
Scal. F-H	<input checked="" type="checkbox"/>
Scal. Contrast	<input checked="" type="checkbox"/>

GEOMETRY MODE ALIGNMENT

4/3 picture tube

Signal : 4/3 test pattern

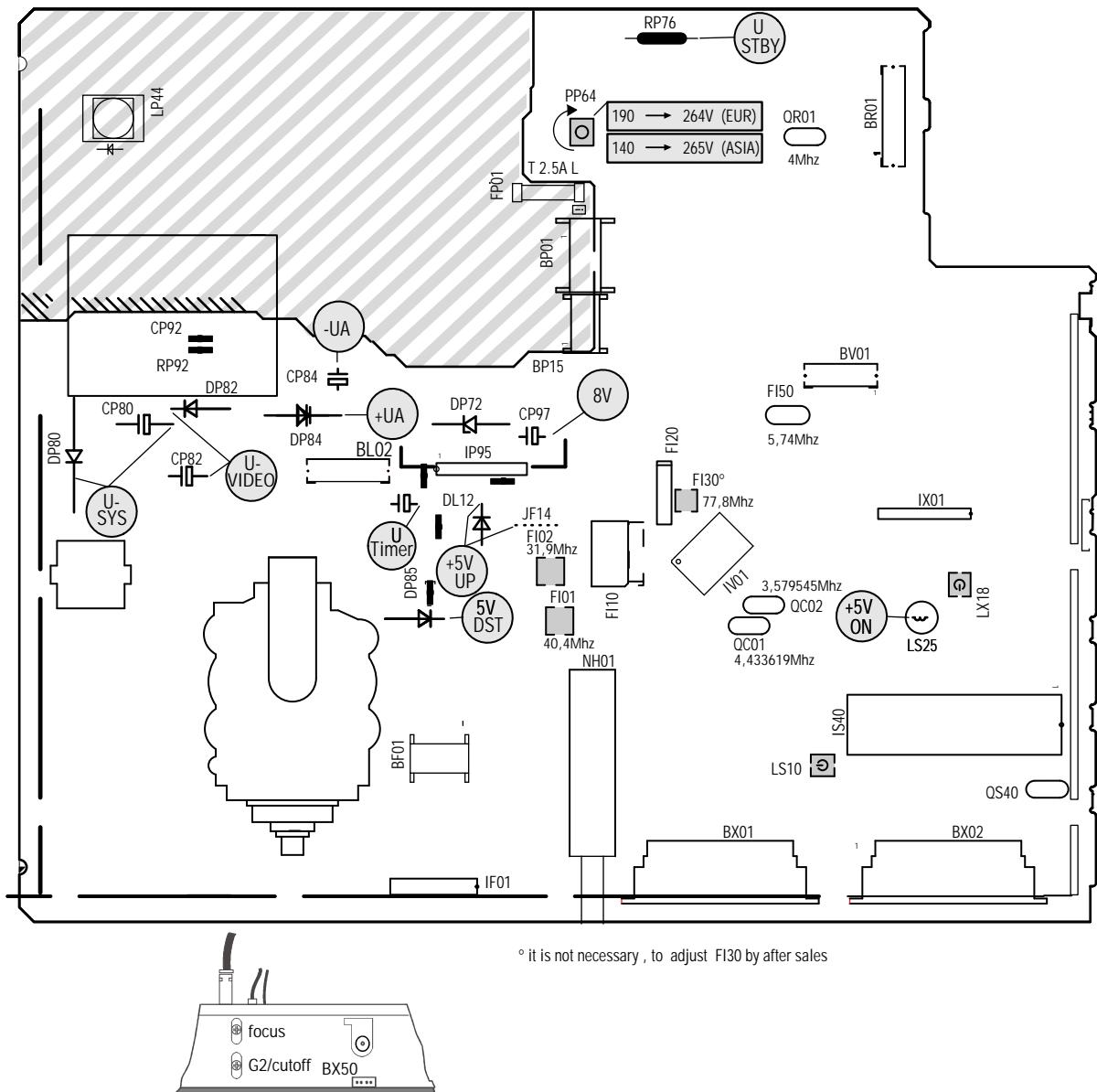
4 / 3 standard mode zoom 0		overscan V=107% , H=107% 1- Adjust Vertical position and Vertical amplitude 2- Adjust Vertical Blanking and linearity
<4/3> zoom 1		3- Adjust Horizontal position and Horizontal amplitude
16 / 9 standard mode zoom 0		4- Adjust EW Amplitude ,EW Shape and Trapezium
<16 / 9> zoom 1		Adjust the vertical height until V = 80%
16 / 9 standard mode zoom 0		Adjust the vertical height : V =90%

16/9 picture tube

Signal : 4/3 test pattern

16 / 9 standard mode zoom 0		overscan V=107%, H =107% 1- Adjust Vertical position and Vertical amplitude 2- Adjust Vertical Blanking and linearity
16 / 9 standard mode zoom 0		3- Adjust Horizontal position and Horizontal amplitude
16 / 9 standard mode zoom 0		4- Adjust EW Amplitude ,EW Shape and Trapezium

LOCATION OF CONTROLS - EMPLACEMENT DES REGLAGES - SERVICE LAGEPLAN - POSIZIONE REGOLATORI DI SERVIZIO - SITUACIÓN DE LOS AJUSTES

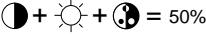
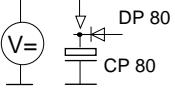
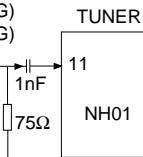
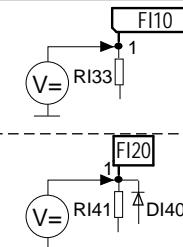
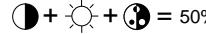
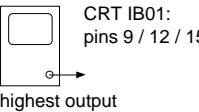
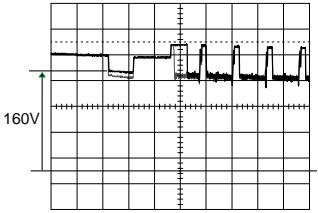


Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello châssis collegata alla rete.
Parte del chassís conectada a la red.



- Use isolating mains transformer -
- Utiliser un transformateur isolateur du secteur -
- Trenntrafo verwenden -
- Utilizar un transformador aislador de red -
- Utilizzare un trasformatore per isolarsi dalla rete

ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES

U Sys	PP 64			<table border="1"> <thead> <tr> <th>Tube</th><th>Format</th><th>Usys</th><th>Jumper</th><th>RL65</th></tr> </thead> <tbody> <tr><td>A51EFS83X191</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A59EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr><td>A66EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr><td>A59EGD048X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A68EGD038X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A68AGA25X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>A80AEJ15X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr><td>W56EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr><td>W66EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr><td>W76EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> </tbody> </table>	Tube	Format	Usys	Jumper	RL65	A51EFS83X191	4:3	126V+/-0,5V	JL80	4k7	A59EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A66EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A59EGD048X30	4:3	126V+/-0,5V	JL80	4k7	A68EGD038X30	4:3	126V+/-0,5V	JL80	4k7	A68AGA25X01	4:3	126V+/-0,5V	JL80	4k7	A80AEJ15X01	4:3	126V+/-0,5V	JL80	4k7	W56EGV023X015	16:9	138V+/-0,5V	JL82	47k	W66EGV023X015	16:9	138V+/-0,5V	JL82	47k	W76EGV023X015	16:9	138V+/-0,5V	JL82	47k
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IF Alignment Alignment FI	trap 40,4Mhz FI 01 trap 31,9Mhz FI 02	<p>Switch set to standard BG Commuter le TV au standard BG</p> <p>IF Signal 40,4MHz (BG) 31,9MHz (BG)</p> 		<p>Adjust FI01 for minimum value at 40,4Mhz</p> <p>Adjust FI20 for minimum value at 31,9Mhz</p>																																																							
U G2 / cutoff	SCREEN	 <p>AV (no Signal, black screen)</p>																																																									
FOCUS	FOCUS LL05	 <p>Test pattern (standard values)</p>		Sharp picture																																																							

I - EIN-AUSTIEG SERVICE MODE - ACCESSO/USCITA ALLA/DALLA FUNZIONE

I EINSTIEG IN DEN SERVICE MODE

Zugriff über die Tastatur des Fernsehgeräts

- Mit der Fernbedienung das Fernsehgerät in Stand-by schalten. Das Gerät mit dem Netzschalter ausschalten (warten bis LED dunkel ist)
- Gleichzeitig die Tasten **PR-** und **VOL-** drücken und den TV über die EIN/AUS-Taste einschalten.
- Die Tasten **PR-** und **VOL-** (8s) gedrückt halten.

Soft-Ver. V1.00-0 0080
 Config. A5- - -N
 Serial-No. 103465071

▷ QUIT
 TUBE
 SETUP
 GEOMETRY
 VIDEO
 IF

Anmerkung :

Im SERVICE MODE :

- wird die Sperrfunktion (PIN-Nummer) ignoriert und die Kindersicherung gelöscht (reinitialisiert).
- werden alle Ein- und Ausschaltzeitgeber gelöscht.
- wird die SCART - Schaltspannung ignoriert.
- werden AV- Link WSS, EPG und Teletext gesperrt
- wird die automatische Abschaltung bei fehlendem Antennensignal gesperrt.
- werden Kontrast, Farbe und Helligkeit auf Standardwerte gesetzt.
- wird die Bildschärfe auf Mittelstellung (nominal) gesetzt.
- wird der Kontrast-Expander auf "gering.." gesetzt.
- wird das Standardformat bzw. der Standard-Zoom modus gewählt.

I ACCESSO AL SERVICE MODE

tramite i comandi del televisore

- Commutare il televisore in stand-by con il telecomando. Spegnere l'apparecchio con l'interruttore di rete (attendere finché il LED è spento)
- Tenere premuti i tasti **PR-** e **VOL-** accendendo il TV con il pulsante ON/OFF.
- Premere i pulsanti **PR - e VOL -** (8s).

Soft-Ver. V1.00-0 0080
 Config. A5- - -N
 Serial-No. 103465071

▷ QUIT
 TUBE
 SETUP
 GEOMETRY
 VIDEO
 IF

Nota :

Nel service mode:

- la funzione Blocco (Numero Pin) viene ignorata e la funzione Blocco Bambini è reinizializzata.
- Cancello la programmazione sveglia
- Il piedino 8 della scart deve essere ignorato.
- I riconoscimenti AV-Link WSS, EPG e televideo non sono abilitati.
- Nel caso di mancanza di segnale d'antenna, la funzione automatica di standby è disabilitata.
- Contrasto, colore, luminosità : regolazioni di fabbrica.
- Nitidezza: media (nomina)
- L'espansore contrasto è a livello basso.
- Zoom e formato a livello.

2 VORÜBERGEHENDES VERLASSEN DES SERVICE MODE

2 USCITA TEMPORANEA DAL SERVICE MODE

- Auf der Fernbedienung EXIT drücken.
- Mit der Taste Menü gelangen Sie zum Menü Übersicht

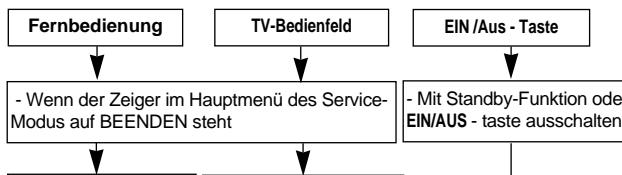
- Mit der blauen Taste gelangen sie zum Service-Menü.

- Premere Exit sul telecomando.
- Al menu di uso quotidiano si accede attraverso il pulsante Menu.

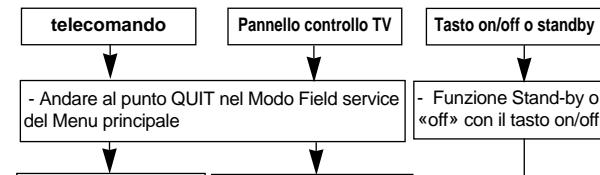
- É possibile rientrare nel Menu Field Service attraverso il pulsante Blu.

3 ENDGÜLTIGES VERLASSEN DES SERVICE MODE

3 USCIRE DAL SERVICE MODE



Werte und Einstellungen, die nicht vor dem Verlassen des Service-Modus gespeichert wurden, werden nicht in den Permanentspeicher übernommen



I Valori e regolazioni non memorizzate prima di uscire dal Service Mode. Non vengono scritti nella NVM

MODO SERVICIO

E

I - ENTRADA/SALIDA MODO SERVICIO

I ACCESO AL MODO SERVICIO

Acceso con panel control TV

- Con el mando a distancia conectar a STANDBY el televisor. Desconectar el aparato con el interruptor de la red (esperar hasta que el LED se apague).
- Pulse los botones PR - y VOL - y sin soltarlos, pulsar la tecla MARCHA:PARADA.
- Libere los botones PR - y VOL - (8S).

Soft-Ver. V1.00-0 0080
Config. A5---N 103465071
ID> QUIT
TUBE
SETUP
GEOMETRY
VIDEO
IF

Nota :

En modo servicio:

- Se ignora la función de bloqueo y se inicializa la función "cerradura niños".
- Anula todas las horas programadas
- La pautilla 8 del SCART es ignorada
- La detección WSS AV Link, EPG, y Teletext son desactivados.
- El apagado automático en caso de ausencia de señal de antena es desactivado.
- El contraste, color y brillo son puestos a los valores de fábrica.
- La nitidez es puesta al punto medio.
- La expansión de contraste al nivel bajo
- Modo Instalación es desactivado.
- Zoom y formato ignorados.

2 SALIDA TEMPORAL DEL MODO SERVICIO

- Pulse Salir en el mando a distancia
- Con el botón Menu puede acceder al menú de uso cotidiano.

Puede entrar al Menú Servicio con el botón azul.

3 SALIDA DEL MODO SERVICIO

telecomando Panel de control TV Tecla on/off de

- Vaya al punto QUIT del menú principal de modo Servicio
- Función Stand-by o desconexión (off) con tecla on/off.

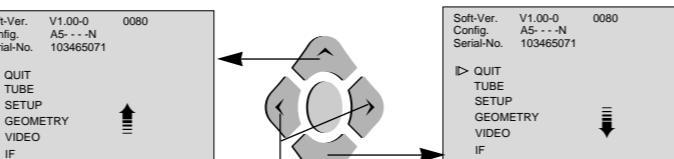
Pulse el botón «<», «OK» o «>»

Pulse el botón «VOL.+»

Modo TV.
Los valores o ajustes no se guardan antes de salir del modo servicio y no se escriben en la NVM

II - NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE FUNCTIONS WALLIN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO

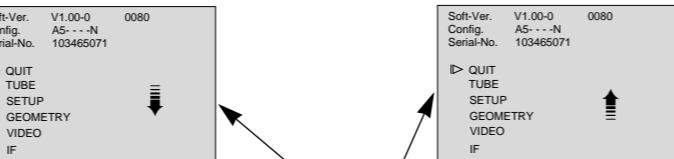
I REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG TELECOMANDO - MANDO A DISTANCIA



Navigation up Navigation down

- Select option
- Option anwählen
- Selezionare l'opzione
- Seleccionar opción
- Change value
- Wert ändern
- Cambiare valore
- Cambiar valor

2 TV CONTROL PANEL - CLAVIER TV - TASTATUR DES FERNSEHGERÄTS - COMANDI DEL TELEVISORE -



Navigation down Navigation up

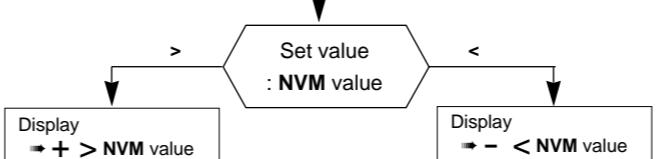
- Select option
- Option anwählen
- Selezionare l'opzione
- Seleccionar opción
- Change value
- Wert ändern
- Cambiare valore
- Cambiar valor

Vol. + → VALUE Vol. - → VALUE

3 DISPLAYING THE VALUE OF THE SETTING - AFFICHAGE DES VALEURS - ANZEIGE DES EINSTELL WERTS VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - VISUALIZACION DEL VALOR DE AJUSTE

H-Position < > OE

00 to FF
Hexadecimal value
valeur hexadécimale
Einstell wert hexadimal
Valore esadecimale
Valor hexadecimale



4 TOGGLE FUNCTIONS - VALIDATION DES FONCTIONS EIN-UND AUSSCHALT FUNKTIONEN - FUNZIONI DI COMMUTAZIONE - FUNCION COMUTACION

To enable a function check (tick) the box.

Pour valider une fonction cocher la case correspondante

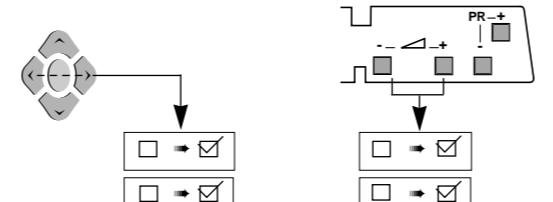
Zum Implementieren einer Funktion das Kontrollkästchen aktivieren (ankreuzen)

Per implementare una funzione di verifica, (vistare) la casella

Para poner en funcionamiento una función verifique (señale) la casilla

: Enable function

: Disable function



5 STORING VALUES IN MEMORY - MEMORISATION DES VALEURS - SPEICHERN DER WERTE - MEMORIZZAZIONE I VALORI - VALORES ALMACENADOS EN LA MEMORIA

After setting, the values are stored in NVM.

Après réglages les valeurs sont mémorisées en NVM.

Nach dem Einstellen werden die Werte im NVM gespeichert.

Dopo la regolazione i valori vengono memorizzati in NVM.

Después del ajuste, los valores son almacenados en NVM

The box becomes

During alignment, values are temporarily stored in RAM.

En cours d'alignement les valeurs sont mémorisées temporairement en RAM

Während des Abgleichs werden die Werte vorübergehend im RAM gespeichert

Durante l'allineamento i valori vengono memorizzati provisoriamente sulla RAM

Durante el ajuste, los valores son almacenados temporalmente en RAM

Store

Copies RAM values into NVM
Copie la valeur RAM en NVM
Kopieren des Werts von RAM nach NVM
Copiare i valori RAM in NVM
Copiar valores RAM en NVM

Restore

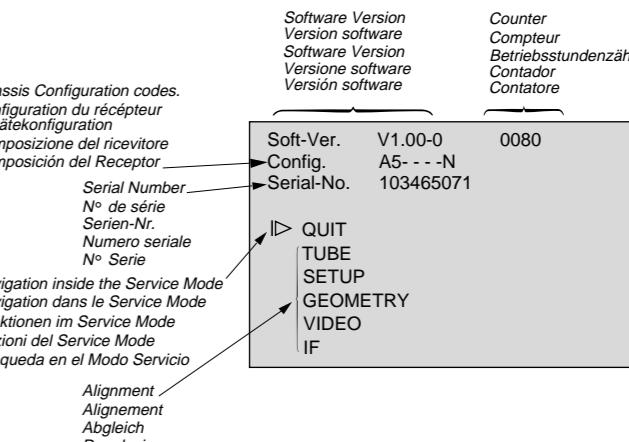
Copies all values from NVM into RAM.
Copie toutes les valeurs des données NVM en RAM
Kopiert alle NVM-Datenwerte in den RAM
Copiare tutti i valori da NVM sulla RAM
Copiar todos los valores de NVM a RAM

ROM Default

All the default values of a page in use are stored in RAM.
L'ensemble des valeurs par défaut d'une page courante est chargé en RAM.
Sämtliche Standardwerte der aktuellen Seite werden im RAM geladen.
Tutti i valori di default di una pagina in uso vengono memorizzati sulla RAM.
Todos los valores por defecto de la página en curso están almacenados en RAM.

III - LITE-MENU FOR FIELD SERVICE MODE - MENUS DU MODE SERVICE

I MAIN MENU - MENU PRINCIPAL



TV CONFIGURATION - CONFIGURATION DU TV - GERÄTEKONFIGURATION - CONFIGURACION DEL TV - CONFIGURACIÓN DEL TV

Config. A1Z-DKC

Character 1 : Tube type : «A»=4/3, «W»=16/9
Character 2 : Chassis type : «5» = 50Hz,
Character 3 : Zoom available : «Z»=yes, «-»=not
Character 4 : Ambiant Sensor : «S»= detected, «-»= not
Character 5 : Dolby : «D»=detected, «-» = not
Character 6 : AV Link detected : «K»=IR link detected, «-» = not
Character 7 : Chassis Variant: «N»= Nicam, «S»=Stereo

Serial-NO. A16-----

Character 1 : Factory : «A»= Angers , «C» =Celle, «T» =Tarancon
Character 2 : Year : «G» = 1996, «H»= 1997 etc.
Character 3 : Month, from : «1»=January to «C»=December
Character 4-9 : Serial NO.

TIME COUNTER - COMPTEUR DE TEMPS - BETRIEBSSTUNDENZÄHLER - CONTATORE - CONTADOR

The counter indicates the TV's number of service hours. It counts from 0 to 65535 hours.
The display is hexadecimal.

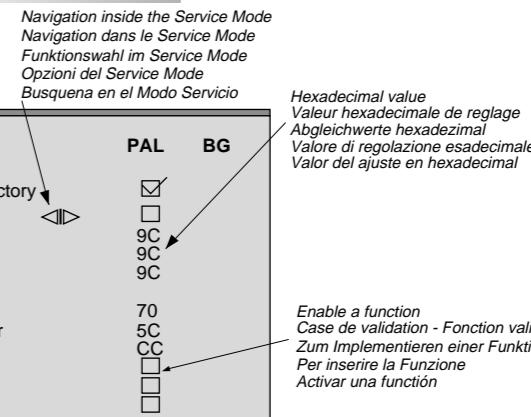
Le compteur de temps indique le nombre d'heures de service du TV. Il compte de 0 à 65535 heures. L'affichage est en hexadécimal.

Der Zähler zeigt an, wieviele Stunden der Fernseher in Betrieb ist. Die Anzeige ist hexadecimale.

Il contatore indica il numero di ore di servizio del TV. Puo' contare da 0 a 65535. La visualizzazione è esadecimale.

El contador indica el número de horas de servicio de la TV. Cuenta de 0 a 65535 horas. El visualizador es hexadecimal.

2 SUBMENU - SOUS-MENU



ALIGNMENT PROCEDURE - PROCESSUS DE REGLAGES - ABGLEICH - VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - PROCEDIMIENTO DE ALINEACION

TUBE	
Return	
Tube type	A66ECY...
Store	<input checked="" type="checkbox"/>
Restore	<input type="checkbox"/>

SETUP	
Return	
Clear Progs.	<input type="checkbox"/>
Kbd. Config.	Default
WSS	<input type="checkbox"/>
Default	<input type="checkbox"/>
Store	<input type="checkbox"/>
Restore	<input type="checkbox"/>

GEOMETRY	
Return	
V-Slope	7C
V-Amplitude	6C
V-Position	<input type="checkbox"/>
Blanking On	7C
S - Correction	54
H-Position	94
H-Amplitude	70
EW-Amplitude	78
EW-Trapezium	98
Default	<input type="checkbox"/>
Store	<input type="checkbox"/>
Restore	<input type="checkbox"/>

VIDEO	PAL	BG
Return	Factory	<input checked="" type="checkbox"/>
Drive Adjust.	<input type="checkbox"/>	
R-Drive	9C	
G-Drive	9C	
B-Drive	9C	
Peak-White	70	
Scale Bright	5C	
Scale Colour	CC	
Scale Contr.	<input type="checkbox"/>	
Default	<input checked="" type="checkbox"/>	
Store	<input checked="" type="checkbox"/>	
Restore	<input type="checkbox"/>	

IF	
Return	
AGC Take Over	<input type="checkbox"/>
FFI - Bit	<input type="checkbox"/>
Default	<input checked="" type="checkbox"/>
Store	<input checked="" type="checkbox"/>
Restore	<input checked="" type="checkbox"/>

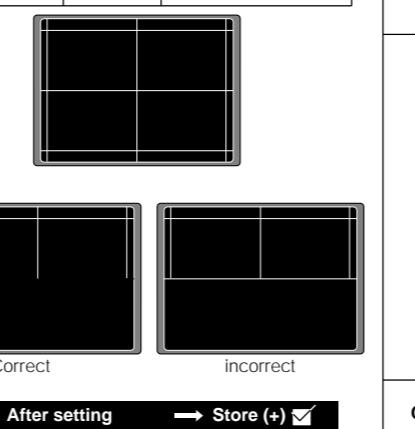
TUBE	
Return	Closes the sub-menu and returns to the "Main Service Menu". Press </> on the RCU or VOL+/VOL- on TV front panel.
Tube type	Retourne au menu principal.
Verlassen des Untermenüs,das Hauptmenü	Verlassen des Untermenüs.
Chiu il sottomenù e fa apparire il menu principale Field Service Mode.	Chiu il sottomenù. El menú Field Service Mode aparece.
Chiu il sottomenù e fa apparire il menu principale Field Service Mode.	Chiu il sottomenù. El menú Field Service Mode aparece.
Cierra el submenú. El menú Field Service Mode aparece.	Press </>: remote control; Vol. +/- : TV keyb.

SETUP	
Return	Closes the sub-menu and returns to the "Main Service Menu".
Verlassen des Untermenüs	Retourne au menu principal.
Chiu il sottomenù e fa apparire il menu principale Field Service Mode.	Chiu il sottomenù e fa apparire il menu principale Field Service Mode.
Chiu il sottomenù e fa apparire il menu principale Field Service Mode.	Chiu il sottomenù. El menú Field Service Mode aparece.
Cierra el submenú. El menú Field Service Mode aparece.	Press </>: remote control; Vol. +/- : TV keyb.

GEOMETRY	
Return	Closes the sub-menu and returns to the "Main Service Menu".
Verlassen des Untermenüs	Retourne au menu principal.
Chiu il sottomenù e fa apparire il menu principale Field Service Mode.	Chiu il sottomenù e fa apparire il menu principale Field Service Mode.
Chiu il sottomenù e fa apparire il menu principale Field Service Mode.	Chiu il sottomenù. El menú Field Service Mode aparece.
Cierra el submenú. El menú Field Service Mode aparece.	Press </>: remote control; Vol. +/- : TV keyb.

GEOMETRY	
9.Adjust position H.	
9.Regler la position H	
9.Korrigieren Sie Horizontale Lage.	
9.Regolare la posizione H	
9.Ajuste la posición H	
10.Ajuster l'amplitude H	
10.Adjust amplitude H	
10.Korrigieren Sie Horizontal-Amplitude	
10.Regulare l'amplitude H	
10.Ajuste la amplitud H	
11-12.Correction of EW pincushion distortion.	
11-12.Corrrection de cossu EW	
11-12.Korrektur der Ost/West Kissenvierzerrung.	
11-12.Correzione della distorsione a cuscino EW	
11-12.Corrección de la distorsión de cojín EW	
13.Correction of corners (Shape).	
13.Correction de coins (Shape)	
13.Korrektur der Ecken.	
13.Correzione degli angoli (Forma)	
13.Correzione di esquinas (Shape)	
14.Trapeze. / Trapéze	
14.Trapezio- / Trapéze	
14.Trapezio-Verzerrung.	
14.Trapezio / Trapézo	
"These adjustments are not necessary for 4:3 tubes in 16:9 mode"	
"Pour les tubes 4/3 en mode 16/9, ces réglages ne sont pas nécessaire"	
"Diese Einstellungen sind nicht für 4:3 Bildröhren im 16:9 Betrieb erforderlich."	
"Queste regolazioni non sono necessarie per tubi 4/3 in modo 16/9"	
"Estos ajustes no son necesarios para los tubos 4/3 en modo 16/9"	
3.Select "Blanking On" line of the menu and ENABLE (tick) the function, the bottom half of the screen will go black.	
3.Postinier dans le mode Service Blanking. On la moitié basse de l'écran devient noire	
3.Schalten Sie den Blanken Mode ein. Die untere Hälfte des Bildschirms wird schwarz.	
3.Posizionarsi in modo Service Blanking on; la parte inferiore dello schermo diventa nera	
3.Pase al modo Service Blanking On. La mitad inferior de la pantalla se vuelve negra.	
4.Select the "V-Slope" line of the menu and adjust its value until the centre line of the pattern is just invisible.	
4.Aligner "Vertical - Slope" pour que la ligne médiane soit à peine non visible	
4.Regeln Sie "V-Slope" so ein, dass die Mittellinie nahezu verschwindet.	
4.Alineare "Vertical Slope" in modo che la linea centrale sia appena visibile	
4.Alinee "Vertical-Slope" para que la linea media sea casi invisible.	
5.Return to the "Blanking On" line of the menu and DISABLE (un-tick) the function.	
5.Revenir à Blanking On et mettre	
5.Schalten Sie den Blanking-Mode wieder ein und	
5.Ritornare in modo Blanking on e porre	
5.Vuelva a "Blanking on" y poner	
6.Switch the test pattern signal to the crossherring geometry pattern.	
6.Positioner la mire de quadrillage	
6.Speisen Sie ein Gittertestbild ein.	
6.Posizionare il monoscopio	
6.Coloque la plantilla cuadrículada.	
7.Perform the geometry adjustments described below.	
7.Effectuer les réglages de géométrie décrits ci-dessous	
7.Nehmen Sie die Geometrieeinstellung wie unten beschrieben vor:	
7.Effettuare le regolazioni di geometria descritte in precedenza	
7.Efectúe los ajustes geométricos descritos más abajo.	
8.Store /Memoriser /Speichern /Memorizzare /Almacene	

WSS	Automatic detection of DOLBY surround sound and 16/9 Format pictures via Teletext line number 23 is valid on all programmes.
Sélection du process WSS valid pour tous programmes	
WSS (nur bei 16:9 oder Dolby)	Auswertung der Zelle 23 zur automatischen Format umschaltung und Dolby umschaltung
Identification "auto-surround" e "format" tramite il televisori, decodificando la riga 23. La selezione di WSS è valida per tutti i programmi.	
Detección "auto-surround" y "format" a través de la línea 23 de Teletext. La selección del procesamiento WSS es válida para todos los programas.	
<input checked="" type="checkbox"/> detect.enable- aktiv <input type="checkbox"/> disable-inaktiv	



→ After setting → Store (+)

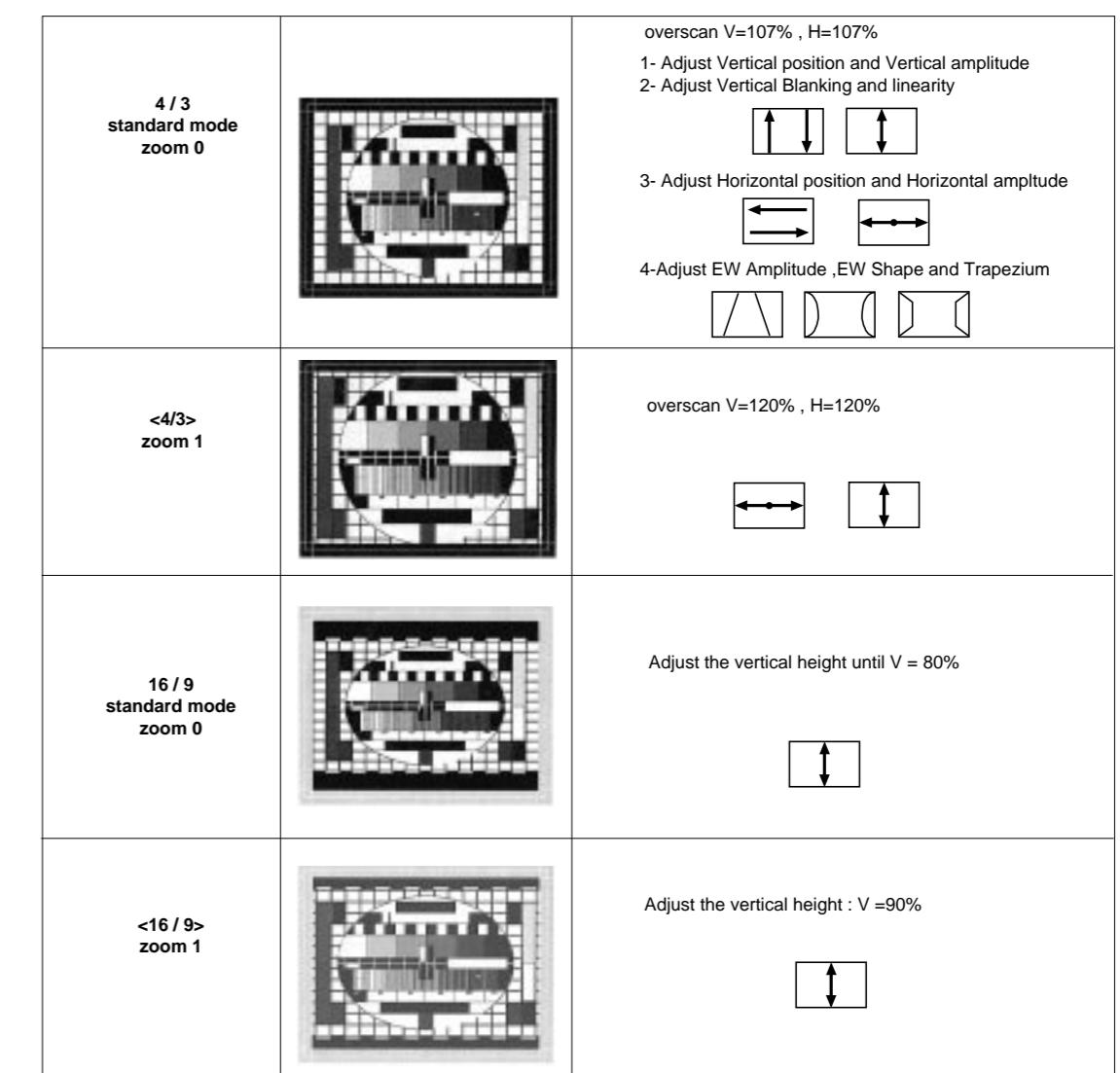
VIDEO	PAL	BG
Return	Factory	<input checked="" type="checkbox"/>
Drive Adjust.	<input type="checkbox"/>	
R-Drive	9C	
G-Drive	9C	
B-Drive	9C	
Peak-White	70	
Scale Bright	5C	
Scale Colour	CC	
Scale Contr.	<input type="checkbox"/>	
Default	<input checked="" type="checkbox"/>	
Store	<input checked="" type="checkbox"/>	
Restore	<input type="checkbox"/>	

IF	
Return	
AGC Take Over	<input type="checkbox"/>
FFI - Bit	<input type="checkbox"/>
Default	<input checked="" type="checkbox"/>
Store	<input checked="" type="checkbox"/>
Restore	<input checked="" type="checkbox"/>

GEOMETRY MODE ALIGNMENT

4/3 picture tube

Signal : 4/3 test pattern

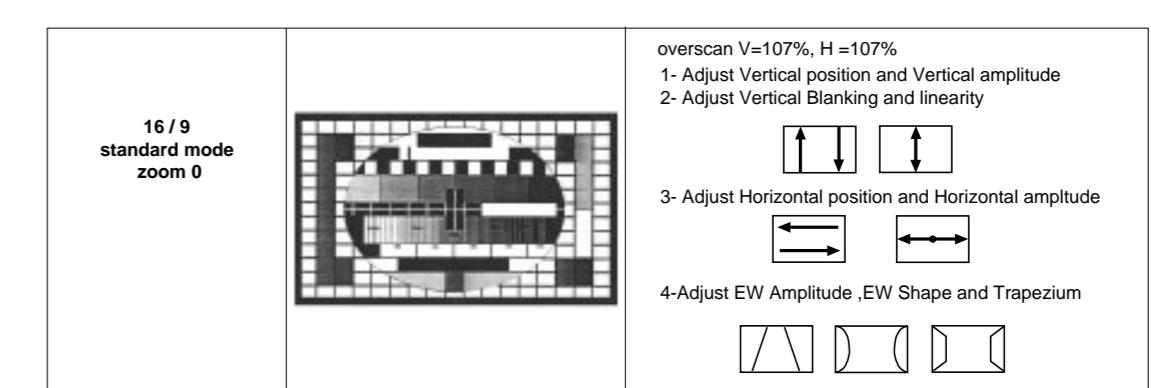


Note :
* adjust separate for PAL/NTSC/SECAM and RGB/AV
* adjust separate for PAL/SECAM and RGB/AV

* After PEAK white adjustment control cut off setting.
Repeat the adjustments if necessary.
Nach der Einstellung von "Peak white" die "Cut off"-Einstellungen wiederholen.

16/9 picture tube

Signal : 4/3 test pattern



Tube Name	LIST name	Description
A51EFS83X191	A51EFS	4:3-21° OT- AK-Mask: Ccty-M
A59EHJ43X15	A59EHJ	4:3-25° MP- AK-Mask: Vector
A66EHJ43X15	A66EHJ	4:3-28° MP- AK-Mask: Vector
A68EGD039X30	A68EGD	4:3-29° SF- Invr-Mask: Vector
A90AEJ13X01	A90AEJ	4:3-33° MP AK-Mask: Ccty-M
A90EGD049X30	A90EGD	4:3-25° SF- Invr-Mask: Vector
A68AGA25X01	A68AGA	4:3-29° VHP- AK-Mask: Ccty-M
W56EGV023X015	W56EGV	16:9-24° SF- Invr-Mask: Vector
W66EGV023X015	W66EGV	16:9-28° SF- Invr-Mask: Vector
W76EGV023X015	W76EGV	16:9-32° SF- Invr-Mask: Vector

Definir el tubo correcto después de haber cambiado el NVM.6 caracteres.Los nuevos valores de tipo de tubo (con la y la geometria por defecto) se activan inmediatamente. Los parámetros variables de geometria y video se graban en el NVM al seleccionar la función Store. Vea más abajo la lista de tubos.

→ After setting → Store (+)

Tube Name	LIST name	Description
A51EFS83X191	A51EFS	4:3-21° OT- AK-Mask: Ccty-M
A59EHJ43X15	A59EHJ	4:3-25° MP- AK-Mask: Vector
A66EHJ43X15	A66EHJ	4:3-28° MP- AK-Mask: Vector
A68EGD039X30	A68EGD	4:3-29° SF- Invr-Mask: Vector
A90AEJ13X01	A90AEJ	4:3-33° MP AK-Mask: Ccty-M
A90EGD049X30	A90EGD	4:3-25° SF- Invr-Mask: Vector
A68AGA25X01	A68AGA	4:3-29° VHP- AK-Mask: Ccty-M
W56EGV023X015	W56EGV	16:9-24° SF- Invr-Mask: Vector
W66EGV023X015	W66EGV	16:9-28° SF- Invr-Mask: Vector
W76EGV023X015	W76EGV	16:9-32° SF- Invr-Mask: Vector

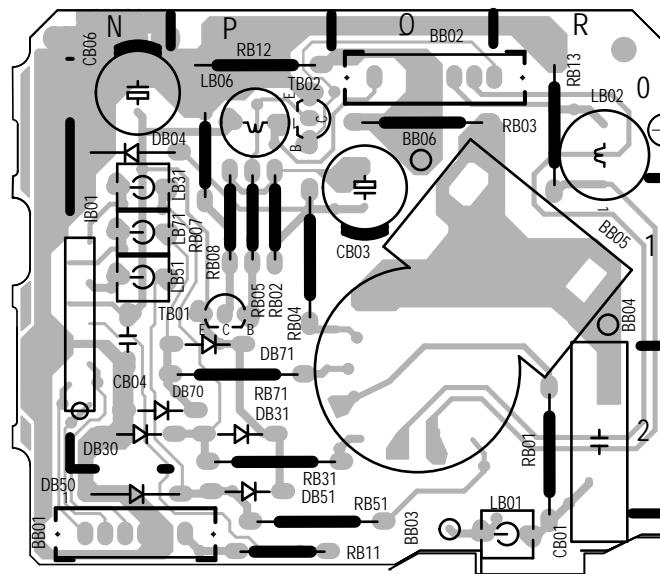
Definir el tubo correcto después de haber cambiado el NVM.6 caracteres.Los nuevos valores de tipo de tubo (con la y la geometria por defecto) se activan inmediatamente. Los parámetros variables de geometria y video se graban en el NVM al seleccionar la función Store. Vea más abajo la lista de tubos.

→ After setting → Store (+)

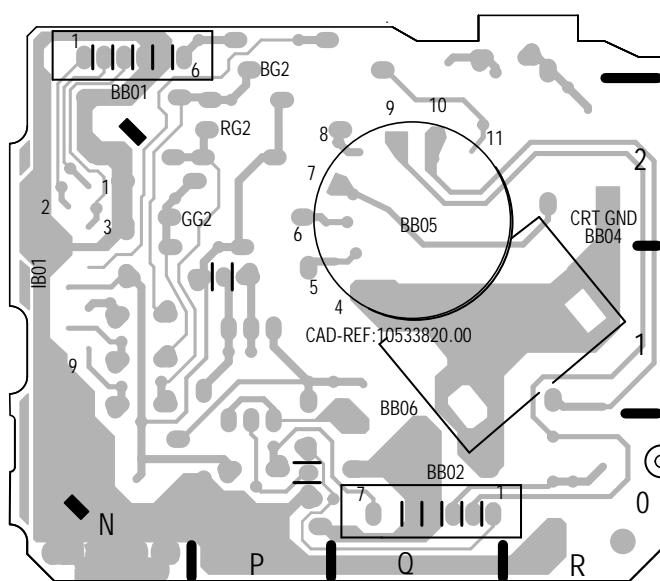
Tube Name	LIST name	Description
A51EFS83X191	A51EFS	4:3-21° OT- AK-Mask: Ccty-M
A59EHJ43X15	A59EHJ	4:3-25° MP- AK-Mask: Vector
A66EHJ43X15	A66EHJ	4:3-28° MP- AK-Mask: Vector
A68EGD039X30	A68EGD	4:3-29° SF- Invr-Mask: Vector
A90AEJ13X01	A90AEJ	4:3-33° MP AK-Mask: Ccty-M
A90EGD049X30	A90EGD	4:3-25° SF- Invr-Mask: Vector
A68AGA25X01	A68AGA	4:3-29° VHP- AK-Mask: Ccty-M
W56EGV023X015	W56EGV	16:9-24° SF- Invr-Mask: Vector
W66EGV023X015	W66EGV	16:9-28° SF- Invr-Mask: Vector
W76EGV023X01		

VIDEO AMPLIFIER BOARD - PLATINE AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKERPLATTE - PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO

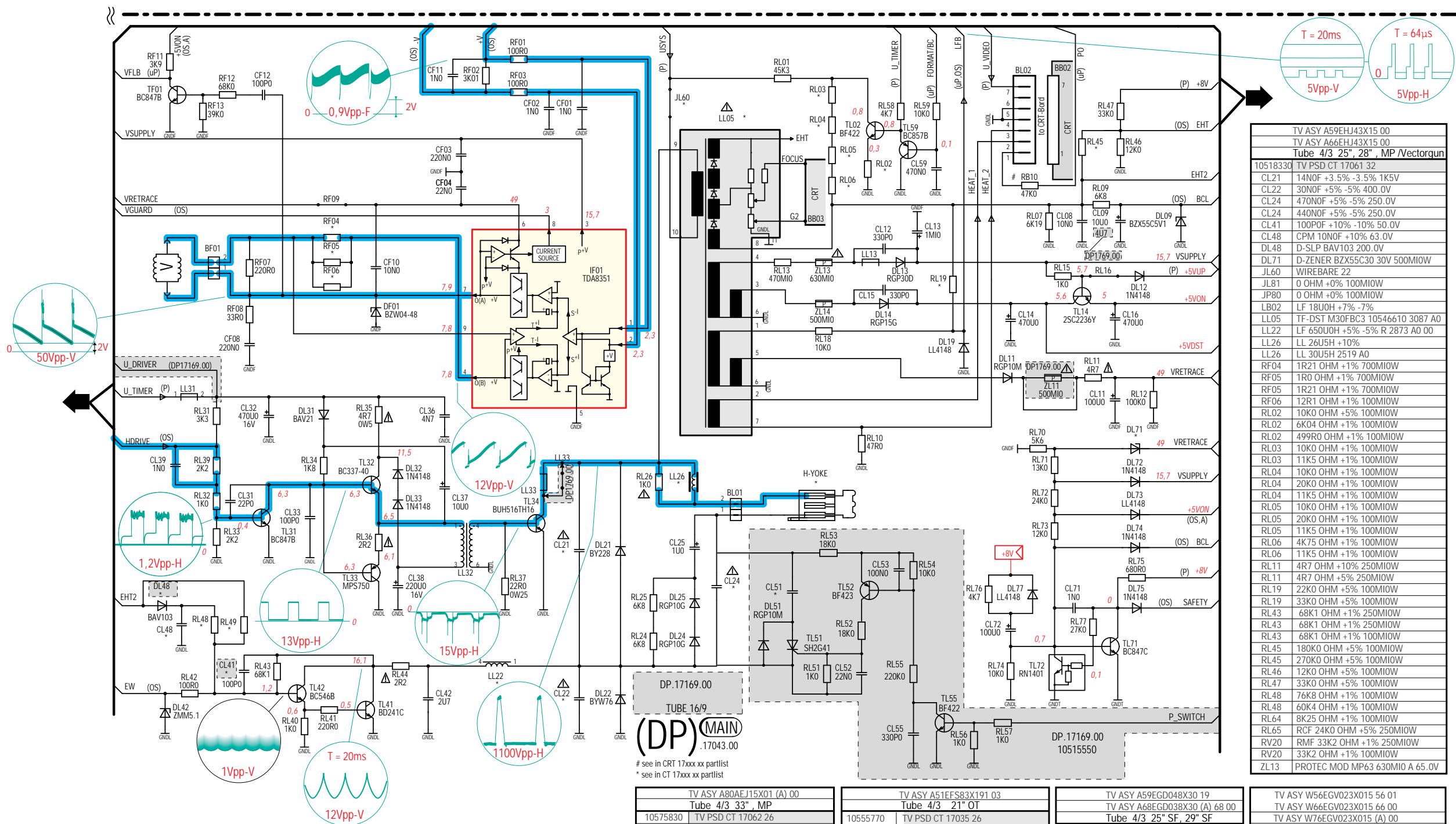
**COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSSEITE -
LATO COMPONENTI - LADO COMPONENTES**



SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



SCANNING - BALAYAGE - ABLENKUNG - BARRIDO - SCANSIONE



⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.

Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) durch nicht normgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (contrassegnati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio.

In tal caso é "esclusa la responsabilità" del costruttore.

La substitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato.

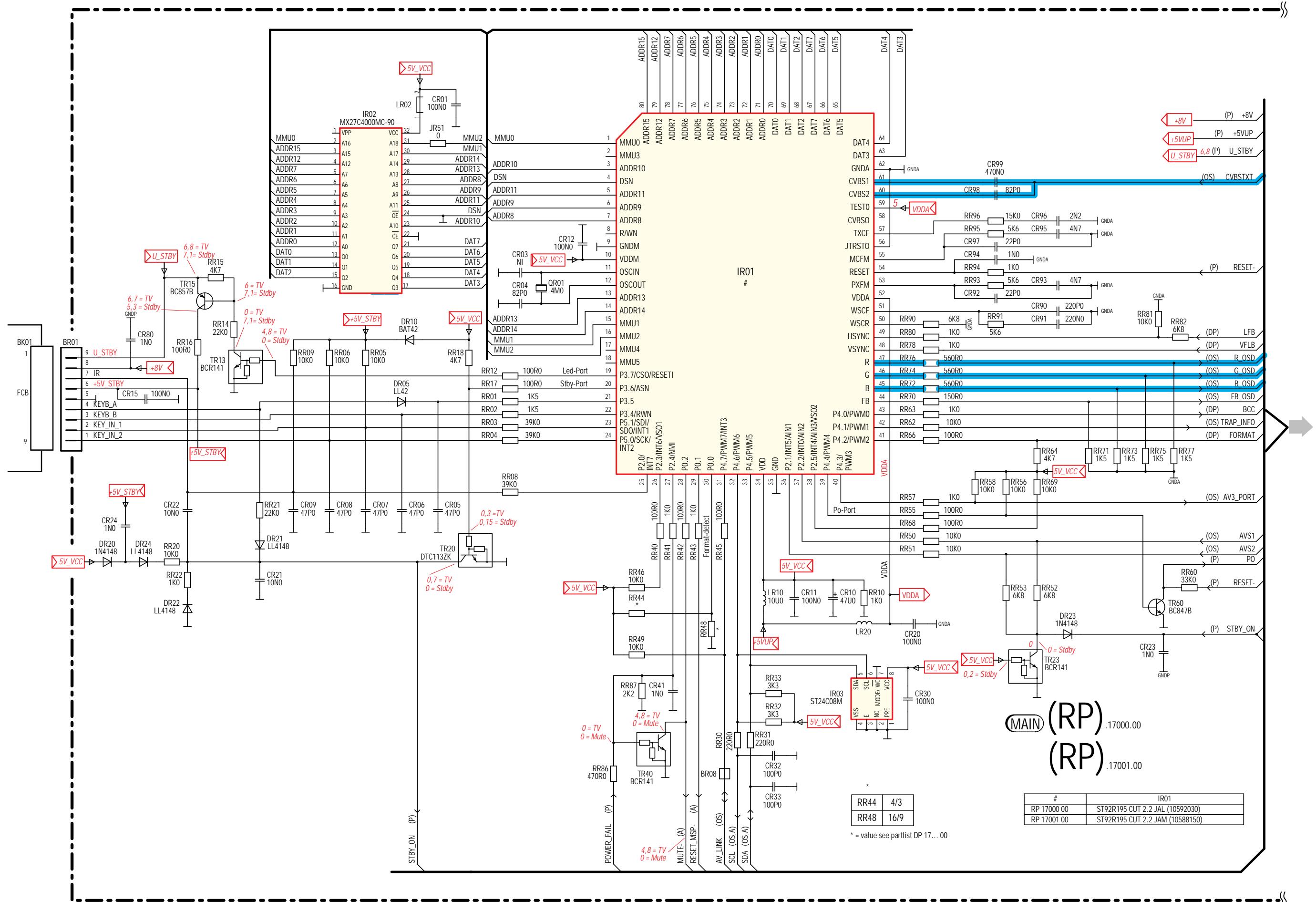
En ese caso, el fabricante cesa de ser responsable.

TV ASY A80AEJ15X01 (A) 00	TV ASY A51EFS83X191 03	TV ASY A59EGD048X30 19
Tube 4/3 33", MP	Tube 4/3 21" OT	Tube 4/3 25", SF, 29" SF
10575830 TV PSD CT 17062 26	10555770 TV PSD CT 17035 26	10515520 TV PSD CT 17071 26
CL21 16N2F +3.5% -3.5% 1K6V	CL21 8N3F +3.5% -3.5% 1K6V	CL21 16N2F +3.5% -3.5% 1K6V
CL22 30NOF +5% -5% 400.0V	CL22 33NOF +5% -5% 1K0V	CL22 30NOF +5% -5% 400.0V
CL24 560NOF +5% -5% 250.0V	CL24 440NOF +5% -5% 250.0V	CL24 510NOF +5% -5% 250.0V
CL41 100POF +10% -10% 50.0V	CL41 1NOF +10% -10% 50.0V	CL41 100POF +10% -10% 50.0V
CL48 10NOF +10% 63.0V	CL48 RGP10M	CL48 10NOF +10% 63.0V
DL48 D-SLP BAV103 200.0V	DL51 BF423	DL48 D-SLP BAV103 200.0V
DL71 D-ZENER BZX55C30 30V 500MIOW	DL52 SH2641	DL71 D-ZENER BZX55C24 24V 500MIOW
JL60 WIREBARE 22	DL53 100NO	JL60 WIREBARE 22
JL80 0 OHM +0% 100MIOW	DL54 10K0	JL80 0 OHM +0% 100MIOW
LB02 LF 18UOH +4% -4%	DL55 220K0	LB02 LF 18UOH +4% -4%
LL05 TF-DST TDS29 TBD 11	CL55 330PO	LL05 TF-DST TDS29 TBD 13
LL22 LF 650UOH +5% -5% R 2873 A0 00	CL56 BF422	LL22 LF 650UOH +5% -5%
LL26 LL 26U5H +10%	RL57 1K0	LL26 LL 26U5H +10%
RF05 1R21 OHM +1% 700MIOW	RL58 47K0	RF05 1R0 OHM +1% 700MIOW
RL02 6K04 OHM +1% 100MIOW	RL59 10K0	RL02 6K8 OHM +5% 100MIOW
RL03 4K75 OHM +1% 100MIOW	RL60 10K0	RL03 4K75 OHM +1% 100MIOW
RL04 4K75 OHM +1% 100MIOW	RL61 10K0	RL04 4K75 OHM +1% 100MIOW
RL05 4K75 OHM +1% 100MIOW	RL62 10K0	RL05 4K75 OHM +1% 100MIOW
RL06 6K81 OHM +1% 100MIOW	RL63 10K0	RL06 6K81 OHM +1% 100MIOW
RL07 13K0 OHM +5% 100MIOW	RL64 10K0	RL07 13K0 OHM +5% 100MIOW
RL45 150K0 OHM +5% 100MIOW	RL65 4K7 OHM +5% 250MIOW	RL08 10K0 OHM +1% 250MIOW
RL48 76K8 OHM +1% 100MIOW	RL66 10K0	RL09 10K0 OHM +1% 250MIOW
RL49 560K0 OHM +5% 100MIOW	RL67 10K0	RL10 10K0 OHM +1% 250MIOW
RL65 RCF 4K7 OHM +5% 250MIOW	RL68 10K0	RL11 10K0 OHM +1% 250MIOW
RV20 RMF 33K2 OHM +1% 250MIOW	RL69 10K0	RL12 10K0 OHM +1% 250MIOW
ZL13 PROTEC MOD MP63 630MIO A 65.0V	RL70 5K6	ZL13 PROTEC MOD MP63 630MIO A 65.0V

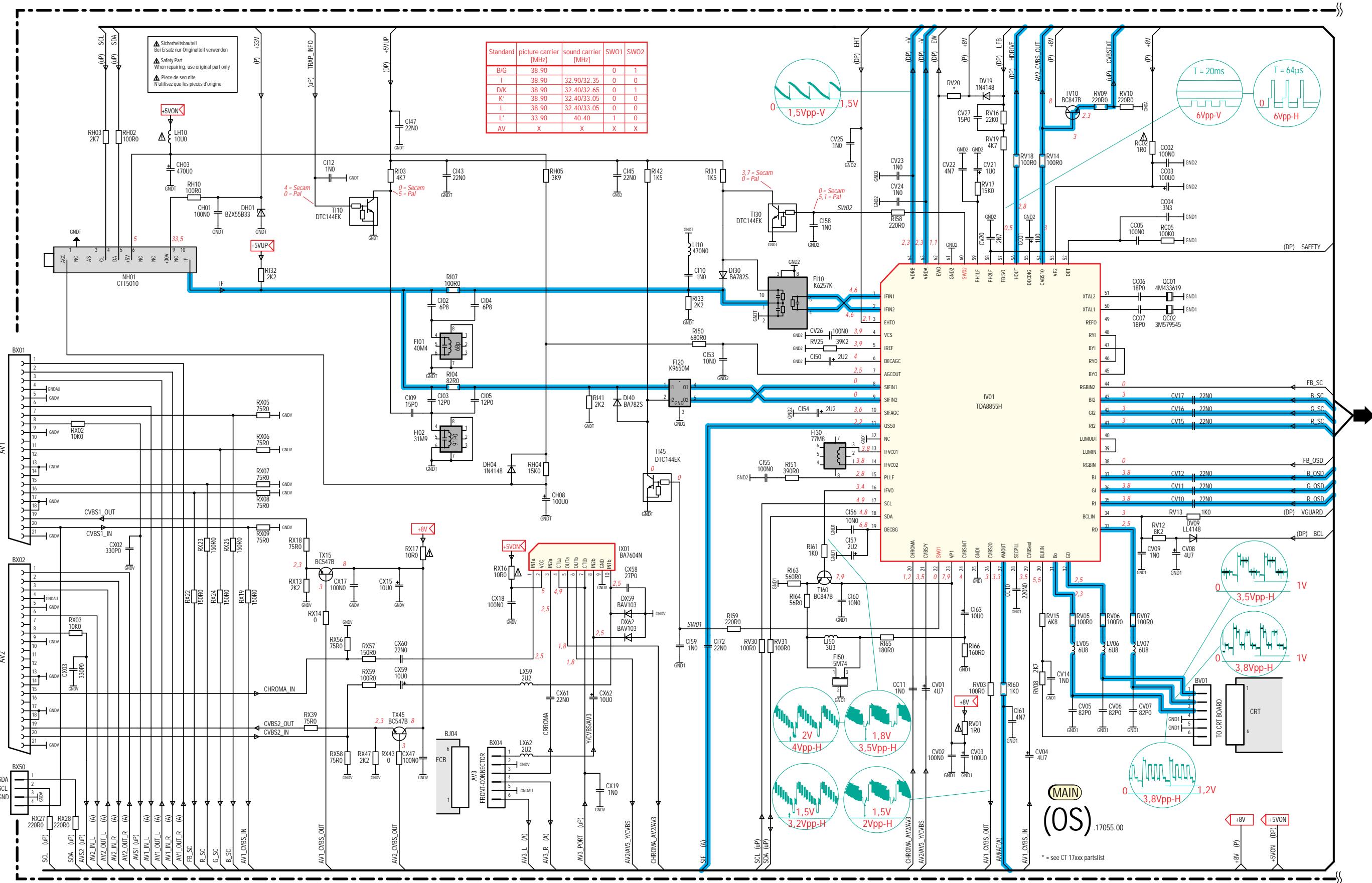
TV ASY A51EFS83X191 03	TV ASY A68EGD038X30 (A) 68 00	TV ASY W76EGV023X015 (A) 00
Tube 4/3 21" OT	Tube 4/3 25", SF, 29" SF	Tube 16/9 24", 28", 32", SF / vectorgun
10555770 TV PSD CT 17035 26	10515520 TV PSD CT 17071 26	10515530 TV PSD CT 17083 38
CL21 8N3F +3.5% -3.5% 1K6V	CL21 16N2F +3.5% -3.5% 1K6V	CL21 15N5F +3.5% -3.5% 1K6V
CL22 33NOF +5% -5% 1K0V	CL22 30NOF +5% -5% 400.0V	CL22 27NOF +5% -5% 400.0V
CL24 440NOF +5% -5% 250.0V	CL24 510NOF +5% -5% 250.0V	CL24 440NOF +5% -5% 250.0V
CL41 1NOF +10% -10% 50.0V	CL41 100POF +10% -10% 50.0V	CL41 100POF +10% -10% 50.0V
CL48 10NOF +10% 63.0V	CL48 10NOF +10% 63.0V	CL48 10NOF +5% 63.0V
DL48 D-SLP BAV103 200.0V	DL48 D-SLP BAV103 200.0V	DL48 D-SLP BAV103 200.0V
DL71 D-ZENER BZX55C30 30V 500MIOW	DL71 D-ZENER BZX55C24 24V 500MIOW	DL71 D-ZENER BZX55C24 24V 500MIOW
JL60 WIREBARE 22	JL60 WIREBARE 22	JL60 WIREBARE 22
JL80 0 OHM +0% 100MIOW	JL80 0 OHM +0% 100MIOW	JL80 0 OHM +0% 100MIOW
LB02 LF 18UOH +7% -7%	LB02 LF 18UOH +4% -4%	LB02 LF 32UOH +4% -4%
LL05 TF-DST M30FBC3 10555640 3087 A0	LL05 TF-DST TDS29 TBD 11	LL05 TF-DST TDS29 TBD 13
LL22 LF 650UOH +5% -5% R 2873 A0 00	LL22 LF 650UOH +5% -5%	LL22 LF 650UOH +5% -5%
LL26 LL 26U5H 10%	LL26 LL 26U5H +10%	LL26 LL 30U5H 2519 A0
RF05 1R21 OHM +1% 700MIOW	RF05 1R0 OHM +1% 700MIOW	RF05 1R21 OHM +1% 700MIOW
RL02 6K04 OHM +1% 100MIOW	RL02 6K8 OHM +5% 100MIOW	RL02 4K99 OHM +1% 100MIOW
RL03 4K75 OHM +1% 100MIOW	RL03 4K75 OHM +1% 100MIOW	RL03 6K49 OHM +1% 100MIOW
RL04 4K75 OHM +1% 100MIOW	RL04 4K75 OHM +1% 100MIOW	RL04 6K49 OHM +1% 100MIOW
RL05 4K75 OHM +1% 100MIOW	RL05 4K75 OHM +1% 100MIOW	RL05 6K49 OHM +1% 100MIOW
RL06 6K81 OHM +1% 100MIOW	RL06 6K81 OHM +1% 100MIOW	RL06 2K37 OHM +1% 100MIOW
RL07 13K0 OHM +5% 100MIOW	RL07 13K0 OHM +5% 100MIOW	RL07 13K0 OHM +5% 100MIOW
RL45 150K0 OHM +5% 100MIOW	RL45 150K0 OHM +5% 100MIOW	RL45 180K0 OHM +5% 100MIOW
RL48 76K8 OHM +1% 100MIOW	RL48 76K8 OHM +1% 100MIOW	RL48 100K0 OHM +5% 100MIOW
RL49 560K0 OHM +5% 100MIOW	RL49 560K0 OHM +5% 100MIOW	RL49 300K0 OHM +5% 100MIOW
RL65 RCF 4K7 OHM +5% 250MIOW	RL65 RCF 4K7 OHM +5% 250MIOW	RL65 4K7 OHM +5% 250MIOW
RV20 RMF 33K2 OHM +1% 250MIOW	RV20 RMF 33K2 OHM +1% 250MIOW	RV20 100K0 OHM +1% 250MIOW

TV ASY W76EGV023X015 56 01	TV ASY W66EGV023X015 66 00	TV ASY W56EGV023X015 56 01
Tube 16/9 24", 28", 32", SF / vectorgun	Tube 4/3 25", 28", SF / vectorgun	Tube 4/3 33", MP
10515530 TV PSD CT 17083 38	10515520 TV PSD CT 17071 26	10515530 TV PSD CT 17083 38
CL21 15N5F +3.5% -3.5% 1K6V	CL21 16N2F +3.5% -3.5% 1K6V	CL21 15N5F +3.5% -3.5% 1K6V
CL22 27NOF +5% -5% 400.0V	CL22 30NOF +5% -5% 400.0V	CL22 27NOF +5% -5% 400.0V
CL24 440NOF +5% -5% 250.0V	CL24 510NOF +5% -5% 250.0V	CL24 440NOF +5% -5% 250.0V
CL41 100POF +10% -10% 50.0V	CL41 100POF +10% -10% 50.0V	CL41 100POF +10% -10% 50.0V
CL48 100NOF +5% 63.0V	CL48 100NOF +5% 63.0V	CL48 100NOF +5% 63.0V
DL48 D-SLP BAV103 200.0V	DL48 D-SLP BAV103 200.0V	DL48 D-SLP BAV103 200.0V
DL71 D-ZENER BZX55C30 30V 500MIOW	DL71 D-ZENER BZX55C24 24V 500MIOW	DL71 D-ZENER BZX55C24 24V 500MIOW
JL60 WIREBARE 22	JL60 WIREBARE 22	JL60 WIREBARE 22
JL80 0 OHM +0% 100MIOW	JL80 0 OHM +0% 100MIOW</	

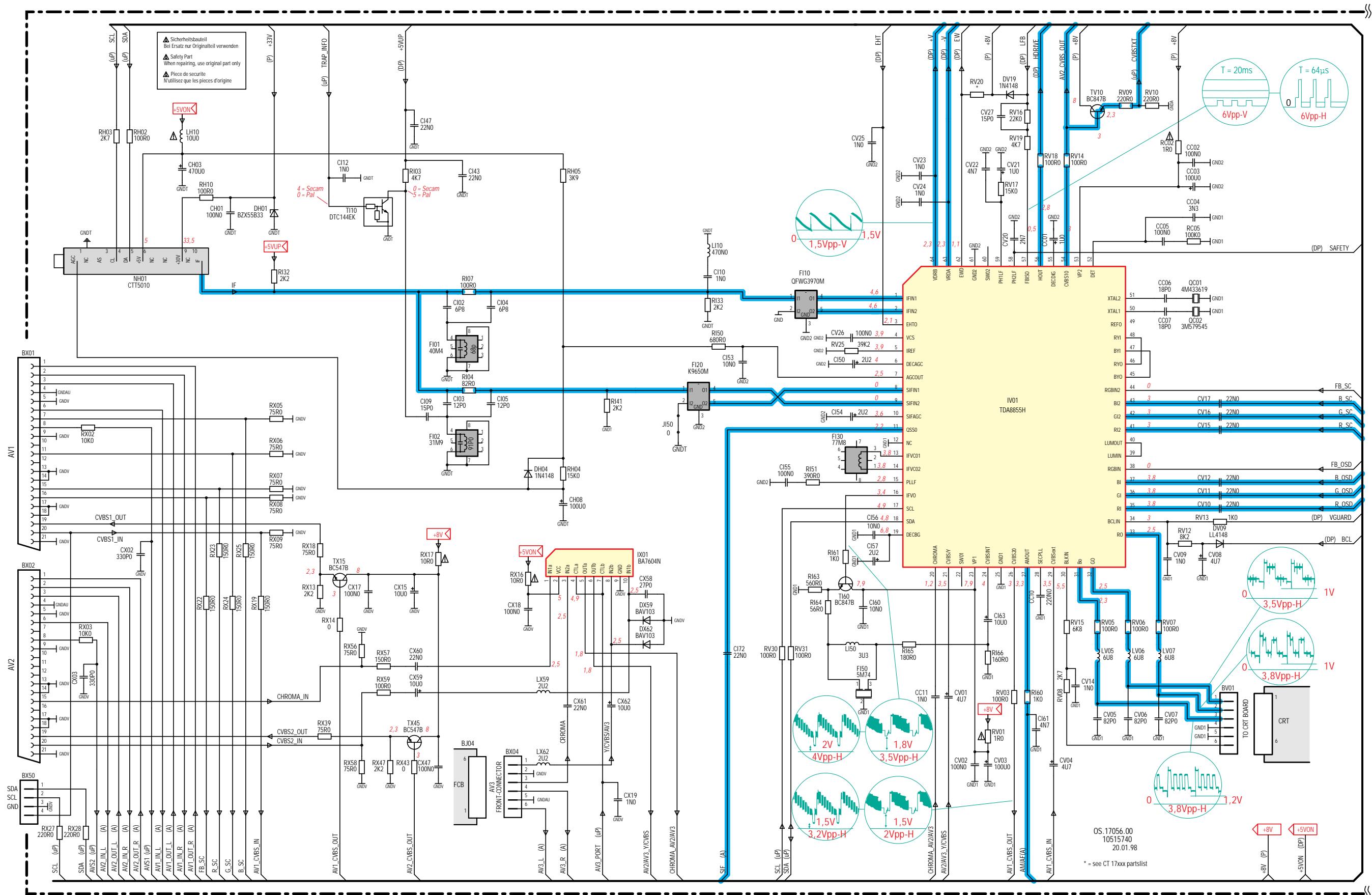
CONTROL MICROPROCESSOR - MICROPROCESSEUR DE COMMANDE - MIKROPROZESSOR - MICROPROCESSORE DEI COMANDI - MICROPROCESADOR DE LOS MANDOS



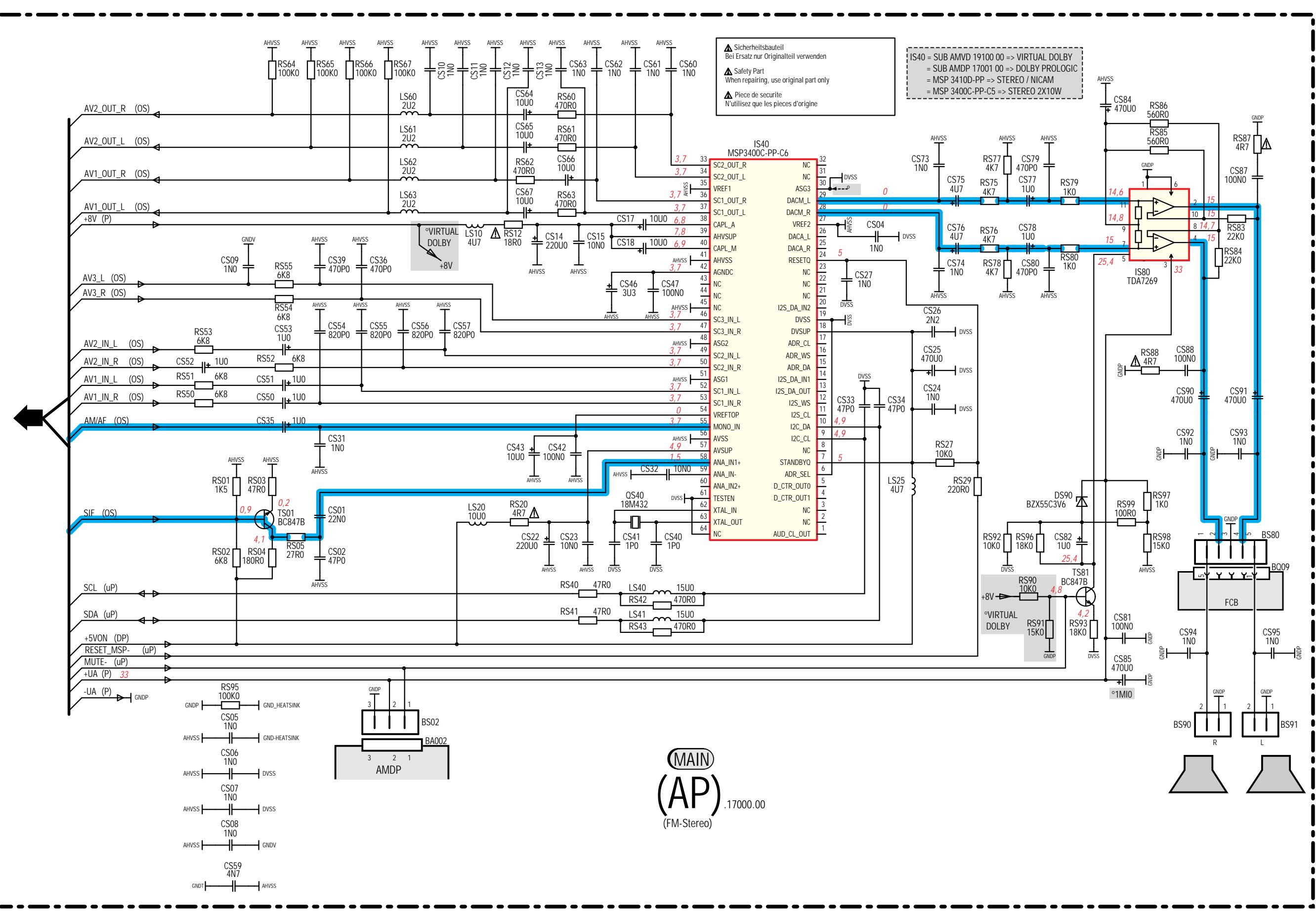
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PER TELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO SIGNALVERARBEITUNG - RF/FI /PRESA PER ITALIA/ELABORAZIONE VIDEO - RF/FI /EUROCONNECTOR / TRATAMENTO VIDEO



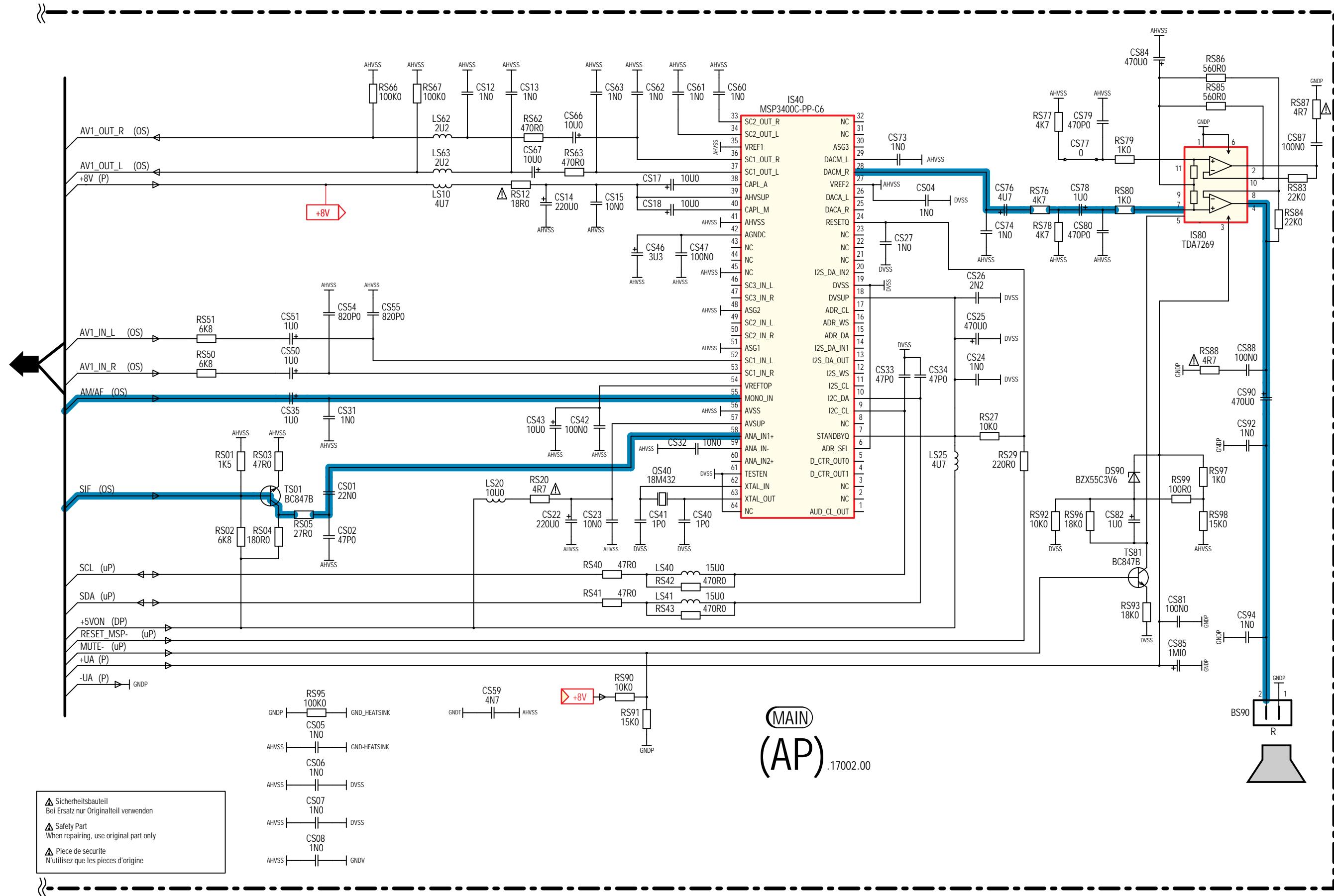
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONNECTOR/TRATAMENTO VIDEO



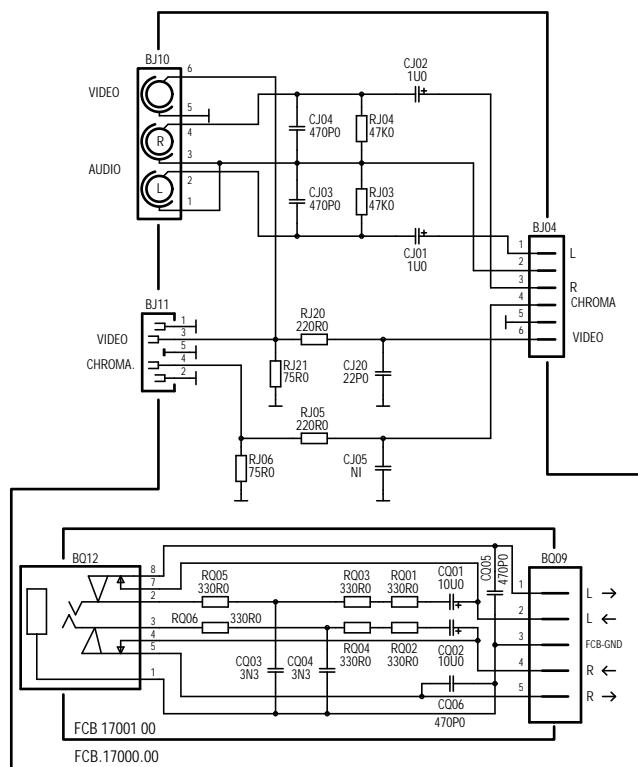
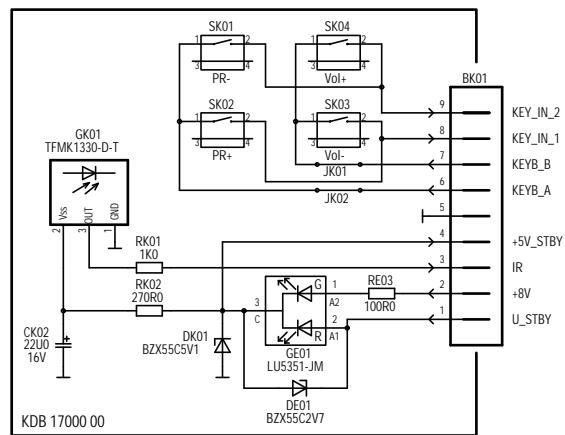
AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE
 ESQUEMA DEL AMPLIFICADOR (STEREO)



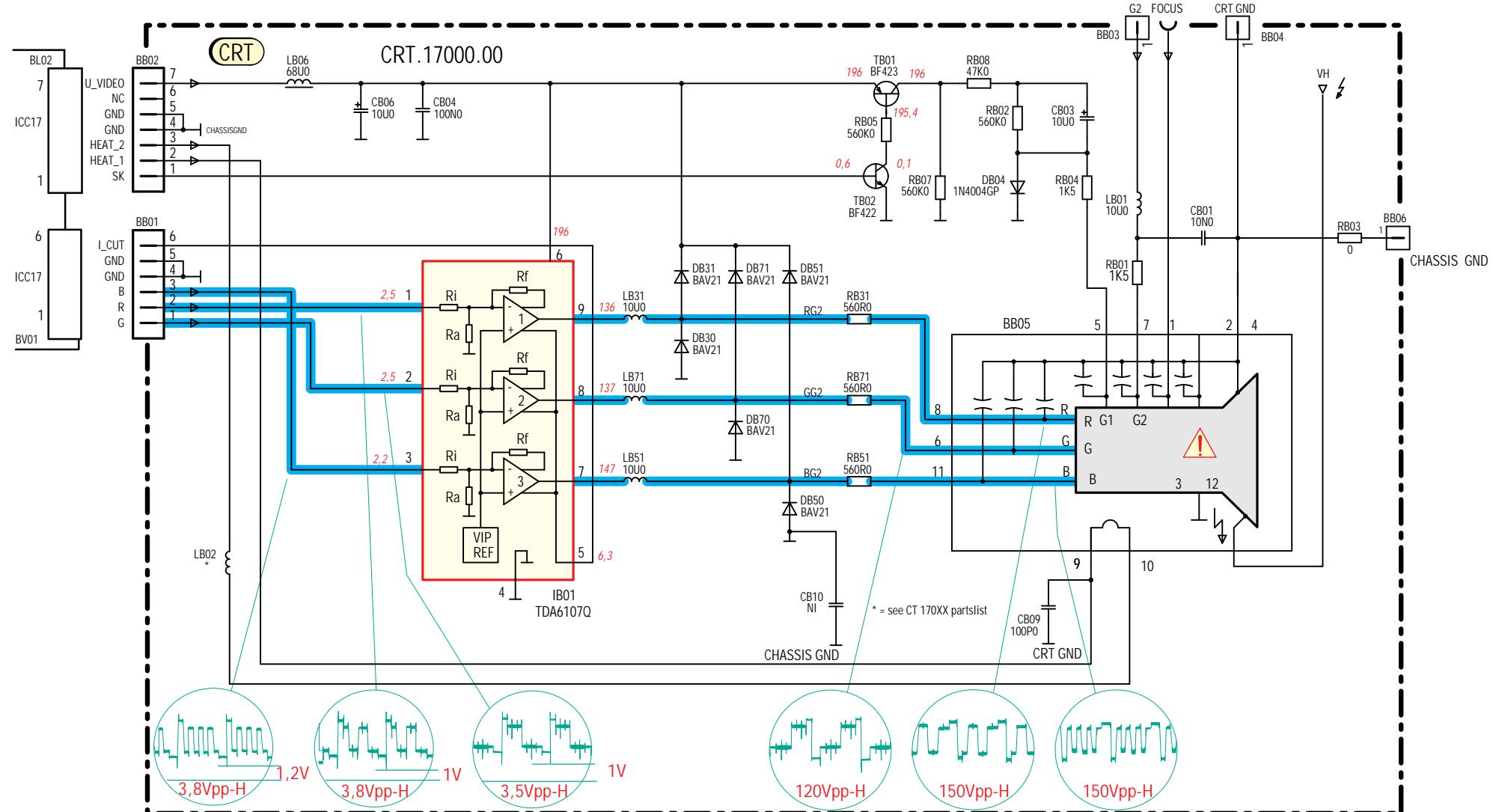
AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERABEITUNG - SCHEMA DELL' AMPLIFICATORE -
ESQUEMA DEL AMPLIFICADOR
(MONO)



**KEY BOARD AND FRONT CONNECTOR BOARD
MODULE PRISE EN FACADE ET INTERCONNEXION DU CLAVIER
TASTATUR UND FRONT ANSCHLUSSPLATTE - PIASTRA CONNESSIONE
PLACA TECLADO Y CONECTORES FRONTALES**



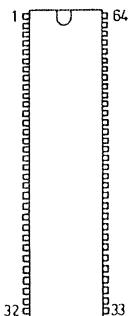
VIDEO AMPLIFIER BOARD - PLATINE AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKERPLATTE - PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO



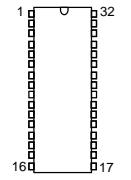
LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS- ABKÜRZUNGEN
LISTA DELLE ABBREVIAZIONI - LISTA DE ABREVIACIONES

- **+USYS:** System voltage
- **+U_VIDEO:** Video drive voltage for the CRT board
- **+ STDBY_ ON:** Standby data (0V standby , 0.6v switched ON)
- **+5V DST:** 5v unregulated voltage from the DST
to supply the tuner and audio MSP device
- **+5V ON:** 5v regulated voltage from the DST
to supply the tuner and audio MSP device
- **+5V UP :** Microprocessor supply voltage
- **BCL:** Beam current limiting information
- **CVBS:** Composite video / luminance signal
- **CVBS_OUT:** Composite video output
- **CVBS_TXT:** Composite video for teletext extraction
- **DEGAUSS:** Degauss signal
- **EW :** East / West
- **FORMAT / BC:** Full white control DATA depending on
16/9 selected format
- **HDRV:** Horizontal deflection signal
- **HTR1 / HTR2:** Heater voltage from the DST to CRT PCB
- **LFB:** Line Fast Blanking
- **MUTE :** Mutes audio amplifiers
- **PO:** “Power ON “ IP95 : reset activated and output = 8v
“PO” = 5v when TV is working in normally
- **POWER_FAIL:** Detection of mains supply and deflection stage failures
- **RESET:** Microprocessor reset signal
- **SAFETY:** Safety information from the deflection stage
- **SCL:** Serial Clock
- **SDA :** Serial Data
- **SIF:** Sound IF
- **TRAP_INFO:** 31.4Mhz IF trap activation
- **U_STANDBY:** Standby voltage
- **U_DRIVER:** Horizontal sync signal from TDA8855H
- **U_TIMER:** 11v voltage used during “Switch ON “ phase
and “Wake Up“ mode
- **V_FLB:** Vertical flyback reference for the microprocessor
- **V_GUARD:** Safety data generated by the vertical amplifier
TDA 8351
- **V_RETTRACE:** 42 / 48volts (depending on tube type) generated by
the DST and used for vertical blanking
- **V_SUPPLY:** 13.5 to 15.5 volts (depending on tube type) generated
by the DST

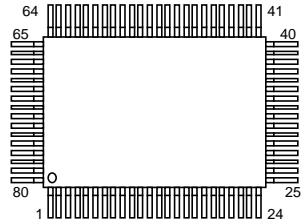
INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE -
CIRCUITS INGRES ET TRANSISTORS
INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN -
CIRCUITI INTEGRATI TRANSISTOR
CIRCUITOS INTEGRADOS Y TRANSISTORES



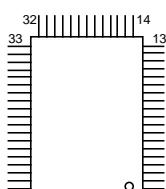
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MX27C200MC-12



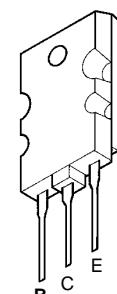
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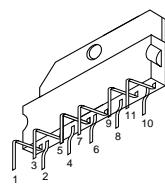
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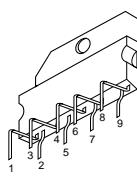
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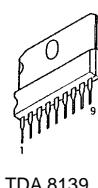
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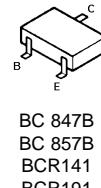
TDA7269



TDA6107Q



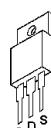
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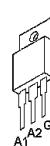
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BC 857B
BCR141
BCR191
DTC113ZK
DTC144EK
TN1401



ST24C08-M
TS3702CD



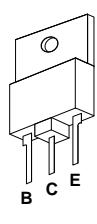
STP6 NA60F1



BT806 -600C



MC7812/CT



BD241C



BC 337
BC 546B
BC 547B



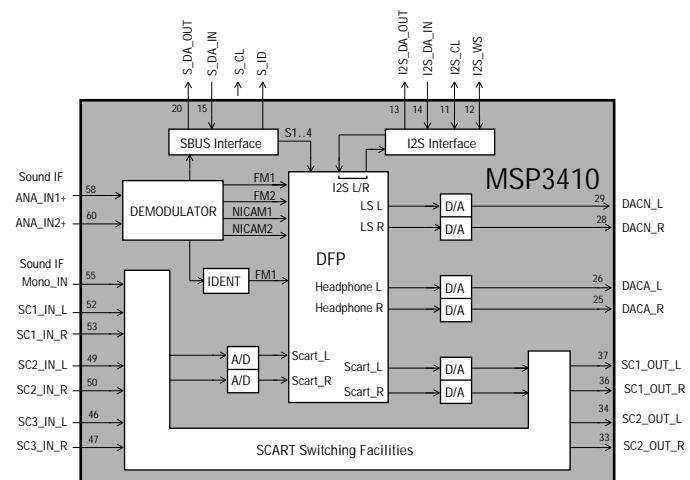
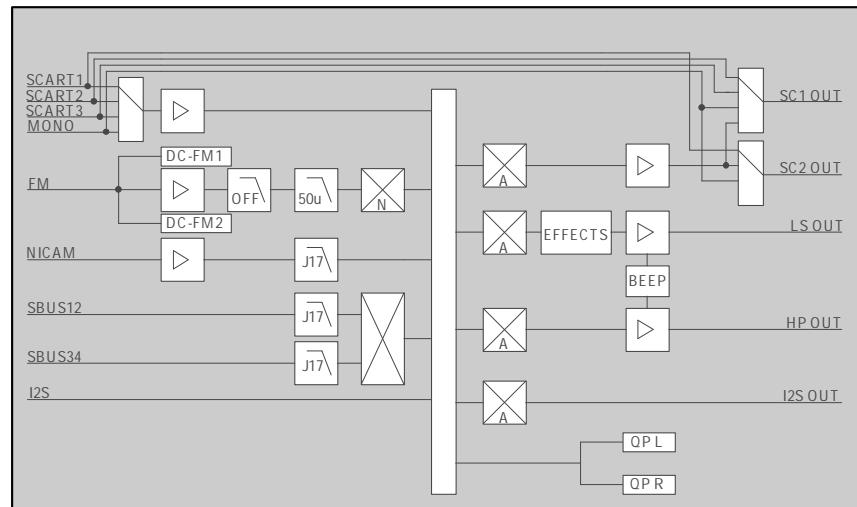
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BF423
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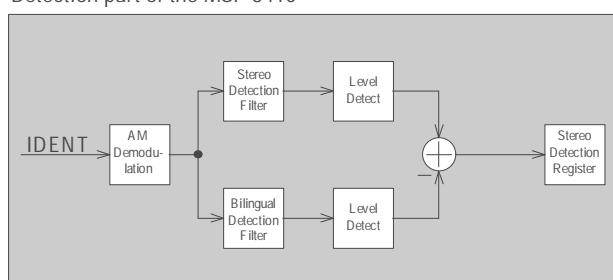
MPS750

**INTEGRATED CIRCUITS BLOCK DIAGRAMS -
SYNOPTIQUES INTERNES DES CIRCUITS INTEGRES -
INTEGRIERTE SCHALTUNGEN BLOCKSCHALTBIHLER
SCHEMA A BLOCCHI DEI CIRCUITI INTEGRATI -
VISTA INTERNA DE LOS CIRCUITOS INTEGRADOS**

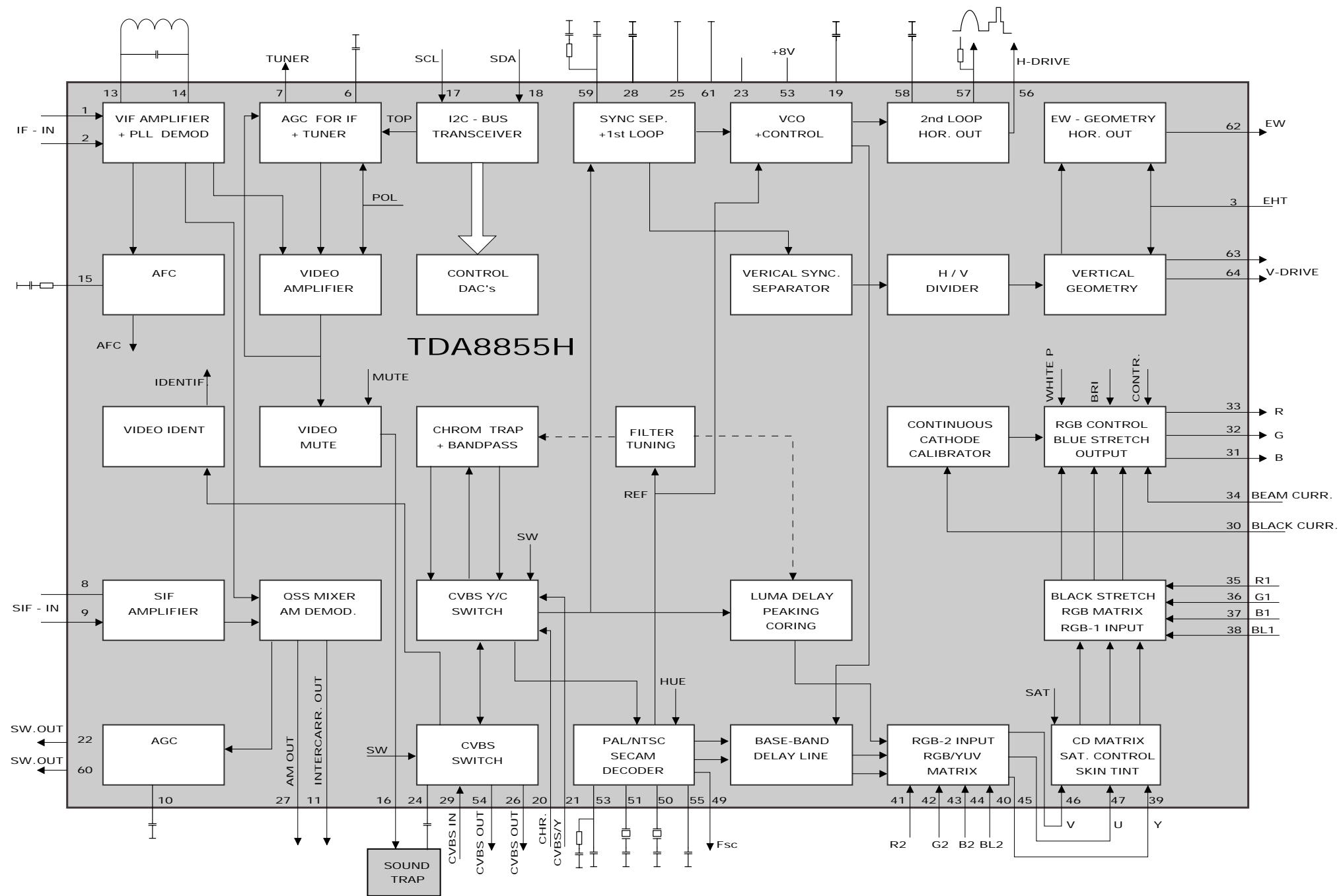
Audio baseband processing of the MSP3410



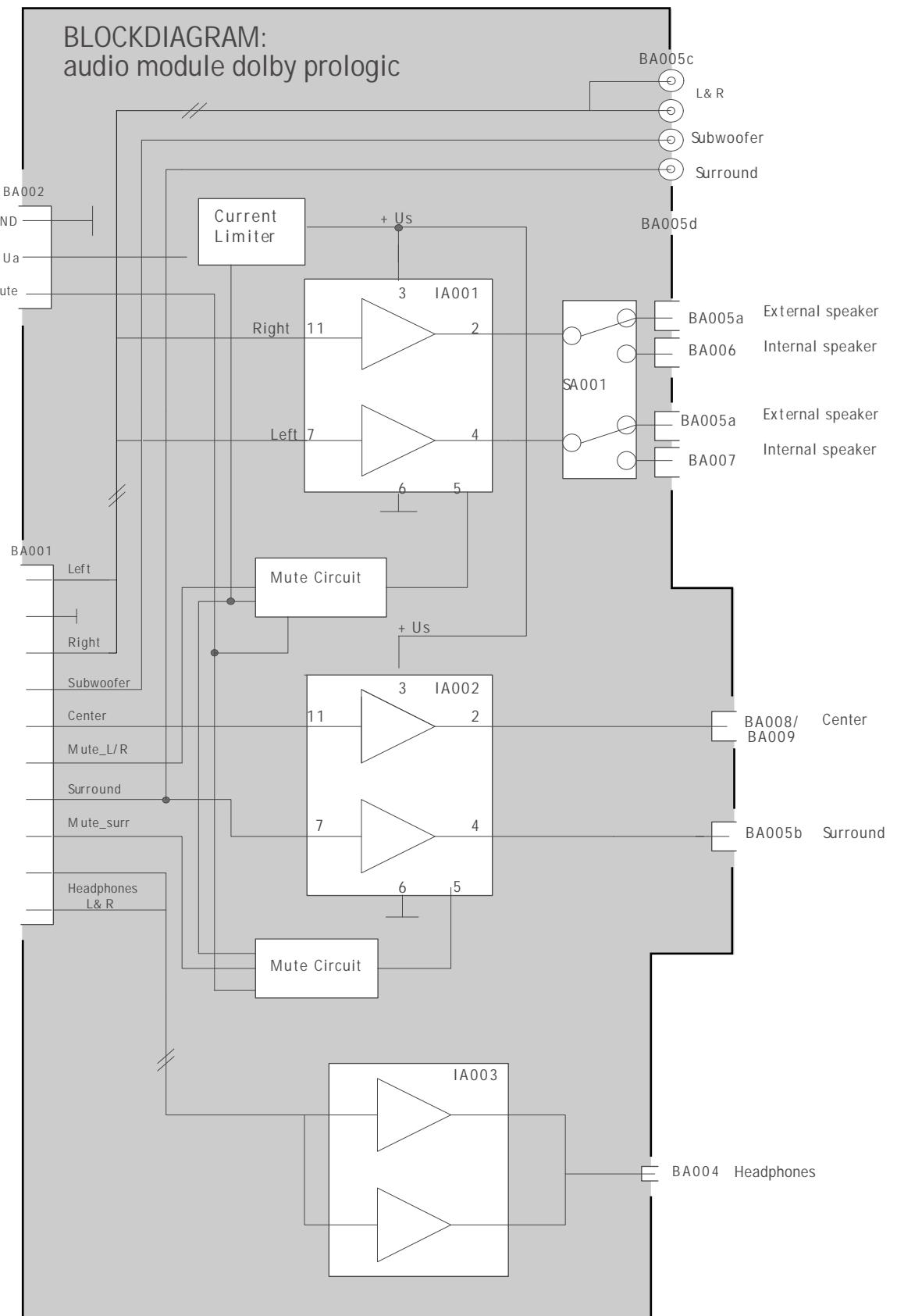
Detection part of the MSP 3410



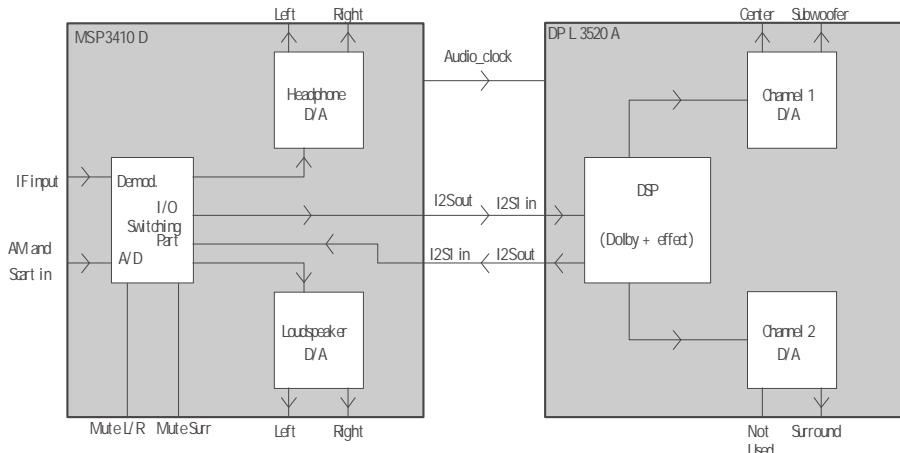
IV01 TDA 8855H



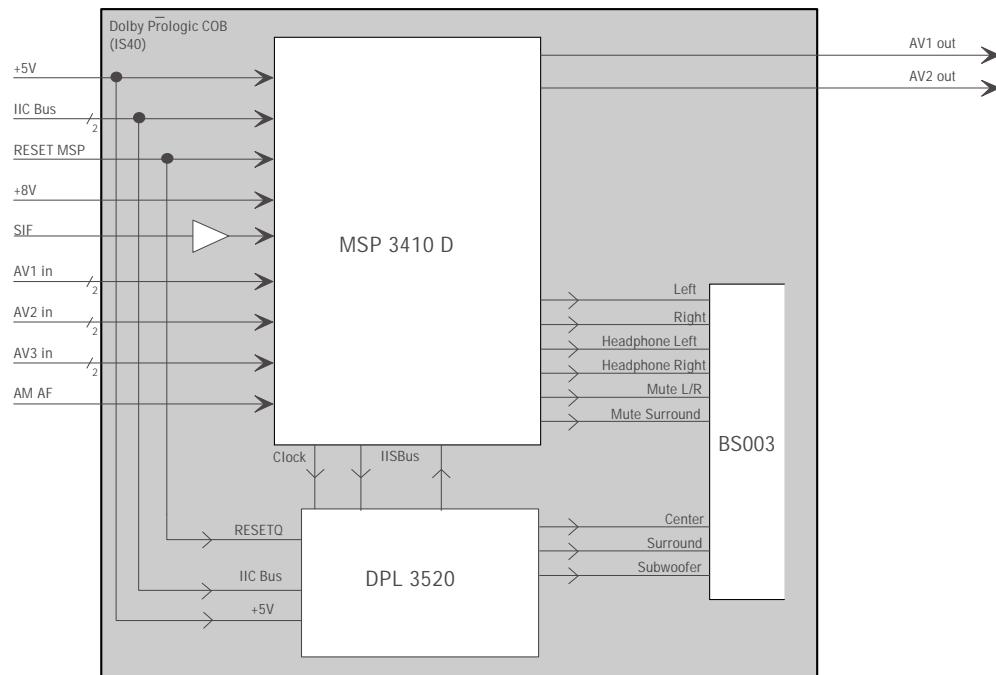
BLOCK DIAGRAM (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA SYNOPTIQUE (AUDIO MODULE DOLBY PROLOGIC)
BLOCKSCHALTBILD (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA A BLOCCI (AUDIO MODULE DOLBY PROLOGIC)
ESQUEMA DE BLOQUES (AUDIO MODULE DOLBY PROLOGIC)



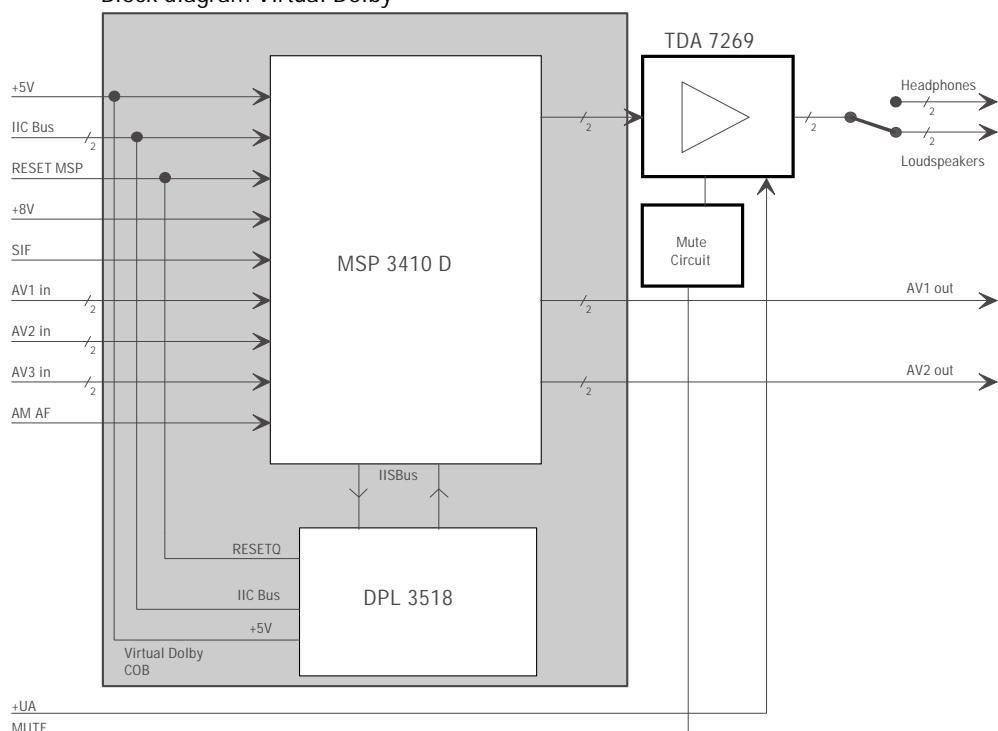
Interface requirement audio part with Dolby Prologic

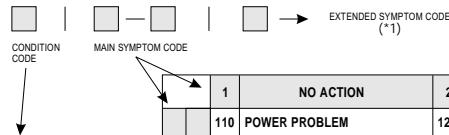


Block diagram Dolby Prologic



Block diagram Virtual Dolby





IRIS REPAIR CODING SYSTEM

SYMPTOM CODE TABLE

	1	NO ACTION	2	LEVEL	3	QUALITY	4	NOISE	5	UNSTABLE	6	RECORDING & PHYSICAL PROBLEMS	7	SPECIAL FUNCTIONS	8	OTHER CONDITIONS
1	110	POWER PROBLEM	120	CHARGING PROBLEM	130	DISPLAY FUNCTION PROBLEM	140	ABNORMAL NOISE	150	REMOTE CONTROL PROBLEM	160	PHYSICAL DAMAGE	170	GENERAL FUNCTION PROBLEM	180	SPECIAL REQUIREMENTS
2	111	NO POWER ON AC	121	NO BATTERY CHARGING	131	FAULTY TIMER/COUNTER DISPLAY	141	CRT DISCHARGING NOISE	151	NO REMOTE CONTROL OPERATION	161	DAMAGED CABINET	171	FAULTY CLOCK FUNCTION	181	TEST AND CHECK
3	113	NO POWER WHEN USING DRY BATTERIES	122	INCOMPLETE BATTERY CHARGE	132	FAULTY LAMP/LED OPERATION	142	EHT DISCHARGING NOISE	152	INCORRECT REMOTE CONTROL OPERATION	162	DAMAGED HANDLE	172	FAULTY SLEEP FUNCTION	182	GENERAL OVERHAUL
4	114	NO POWER WHEN USING RECHARGEABLE BATTERIES	123	OTHER CHARGING PROBLEM	133	FAULTY LEVEL METER OPERATION	143	NOISY CABINET	153	REMOTE CONTROL PROGRAMMING/	163	DAMAGED CONTROL KNOB(S)/BUTTON(S)	173	FAULTY TIMER PROGRAMMING	183	SYSTEM/FREQUENCY CONVERSION
5	115	NO POWER FROM SOLAR CELL	124	SHOR TOPERATION TIME/SHORT BATTERY LIFE	134	FAULTY ON-SCREEN DISPLAY OPERATION	144	NOISY TRANSFORMER	154	LEARNING MODE PROBLEM	164	DAMAGED DOOR/COVER	174	FAULTY TIMER RECORDING	184	INITIAL SETUP REQUESTED
6	116	NO POWER WHEN USING A CAR BATTERY	125	SHOR TOPERATION TIME/SHORT BATTERY LIFE	135	MECHANICAL TUNING/ANTENNA FAULT	145	NOISY COMPONENT(S)	155	POOR REMOTE CONTROL SENSITIVITY	165	DAMAGED PLUG OR SOCKET	175	FAULTY RECORD MUTE OPERATION	185	MOTOR POSITION/ANGLE CHANGE
7	117	NO POWER WHEN USING A CAR BATTERY	126	SHOR TOPERATION TIME/SHORT BATTERY LIFE	136	FAULTY TIME CODE DISPLAY	146	RADIO NOISE	156	OTHER REMOTE CONTROL PROBLEM	166	DAMAGED LENS	176	FAULTY PROGRAMMED PLAYBACK	186	TIME SETTING
8	118	NO POWER-OFF FUNCTION NOT WORKING	127	NO SWITCH-ON FROM STANDBY	137	DISPLAY FUNCTION PROBLEM	147	OTHER ABNORMAL NOISE	157	OPERATION	167	DAMAGED ANTENNA	177	FAULTY MEMORY FUNCTION	187	WRONG SET IN CARTON
9	119	NO SWITCH-ON FROM STANDBY	128	POWERS UP BUT NO OPERATION	138	DISPLAY FUNCTION PROBLEM	148	DISPLAY/DIN	158	OTHER GENERAL FUNCTION PROBLEM	168	DAMAGED RIBBON/STYLUS	178	OTHER SPECIAL REQUIREMENTS	188	OTHER SPECIAL REQUIREMENTS
10	110	OTHER POWER PROBLEM	129	OTHER POWER PROBLEM	139	DISPLAY/DIN	149	DISPLAY/DIN	169	PRINTED MARKINGS ERASED/PEELED OFF	170	PRINTED MARKINGS ERASED/PEELED OFF	179	SYMPOTM NOT AVAILABLE	189	
11	210	NO RECEPTION	220	POOR RECEPTION	230	TRANSMISSION PROBLEM	240	NOISY RECEPTION/TRANSMISSION	250	UNSTABLE RECEPTION/TRANSMISSION	260	TUNING PROBLEM	270	SPECIAL COMMUNICATION PROBLEM	280	SPECIAL RECEPTION PROBLEM
12	211	NO AM RECEPTION	221	POOR FM RECEPTION	231	NO TRANSMISSION	241	LINE NOISE	251	TUNING DRIFT	261	MANUAL TUNING PROBLEM	271	FAULTY DIALLING	281	FAULTY STEREO RECEPTION
13	212	NO FM RECEPTION	222	POOR FM RECEPTION	232	POOR TRANSMISSION	242	OSCILLATION	252	FADING	262	AUTOMATIC TUNING PROBLEM	272	FAULTY CHANNEL SELECTION	282	FAULTY MAIN CHANNEL (A) FUNCTION
14	213	NO SW RECEPTION	223	POOR SW RECEPTION	233	TRANSMISSION LEVEL TOO HIGH	243	INTERSTATION INTERFERENCE	253	OTHER UNSTABLE RECEPTION/TRANSMISSION PROBLEM	263	INCORRECT TUNING	273	FAULTY ANTI-ANNEALING OPERATION	283	FAULTY SUB-CHANNEL (B) FUNCTION
15	214	NO UHF RECEPTION	224	POOR UHF RECEPTION	234	TRANSMISSION LEVEL TOO LOW	244	OTHER NOISE RECEPTION/TRANSMISSION PROBLEM	254	TRANSITION MEMORY PROBLEM	264	TRANSITION MEMORY PROBLEM	274	FAULTY AUTOLOAD	284	FAULTY REWIND/READ-OUT FUNCTION
16	215	NO BS RECEPTION	225	POOR BS RECEPTION	235	POOR TRANSMISSION BETWEEN BASE UNIT AND HANDSET	245	OTHER TRANSMISSION PROBLEM	255	OTHER TUNING PROBLEM	265	FAULTY AUTOLOAD MEMORY	275	FAULTY SPEECH PROCESSING	285	FAULTY RDS/TPS OPERATION
17	216	NO CS RECEPTION	226	POOR CS RECEPTION	236	POOR TRANSMISSION BETWEEN BASE UNIT AND HANDSET	246	OTHER TRANSMISSION PROBLEM	256	NO RINGING TONE	266	NO RINGING TONE	276	FAULTY TELETEXT RECEPTION	286	FAULTY SATELLITE/LR/TY RECEPTION
18	217	NO HDTV RECEPTION	227	POOR HDTV RECEPTION	237	OTHER 'NO RECEPTION' PROBLEM	247	OTHER TRANSMISSION PROBLEM	257	WEAK RINGING TONE	267	OTHER SPECIAL COMMUNICATION PROBLEM	277	FAULTY FAX OPERATION	287	OTHER SPECIAL RECEPTION PROBLEM
19	218	NO GPS RECEPTION	228	POOR GPS RECEPTION	238	OTHER 'NO RECEPTION' PROBLEM	248	OTHER TRANSMISSION PROBLEM	258	OTHER UNSTABLE PICTURE	268	PROBLEM	278		288	
20	310	NO PICTURE	320	PICTURE LEVEL PROBLEM	330	PICTURE QUALITY PROBLEM	340	PICTURE NOISE	350	UNSTABLE PICTURE	360	POOR PICTURE RECORDING	370	SPECIAL PICTURE FUNCTION PROBLEM	380	PICTURE DISPLAY/PICKUP PROBLEM
21	311	NO PICTURE IN E TO E MODE	321	PICTURE TOO DARK	331	POOR PICTURE RESOLUTION	341	SNOWY PICTURE	351	SYNCH PROBLEM	361	NO PICTURE RECORDING	371	EDITING PROBLEM	381	BLINK/MOAN ON DISPLAY/PICKUP
22	312	NO PICTURE IN PLAYBACK MODE	322	PICTURE CONTRAST TOO LOW	332	CONTRAST TOO HIGH	342	POOR FOCUS	352	SCROLL/WIPE/SCRAPER OPERATION	362	NO ERASURE PROTECTION FOR VIDEO	372	SCROLL ON DISPLAY/PICKUP	382	SCROLL ON DISPLAY/PICKUP
23	313	NO PICTURE IN VIEWFINDER	323	PICTURE TOO HIGH	333	PICTURE TOO HIGH	343	PICTURE JITTER	353	PICTURE PUMPING	363	PREVIOUS VIDEO RECORDING NOT BEING	373	FAULTY/PUSH/PUSH/WHITE SWITCHING FUNCTION	383	DUST/DIRT ON DISPLAY/PICKUP
24	314	NO PICTURE: ONLY RASTER	324	PICTURE: ONLY RASTER	334	SATURATED WHITE OR BLACK LEVEL	344	BLANKING LINES ON PICTURE	354	PICTURE SHAKING (HORIZONTAL OR VERTICAL)	364	UNWANTED ERASURE OF PICTURE	374	FAULTY/PUSH/PURPOSE/TEL/OP OPERATION	384	PHOSPHOR/PIXEL MISSING ON DISPLAY/PICKUP
25	315	NO RASTER: BLACK PICTURE	325	PICTURE: ONLY RASTER	335	PICTURE: ONLY RASTER	345	BEATING OF PICTURE	355	FLASHING PICTURE	365	PAUSE/PAUSE IN PICTURE/DIGITAL PICTURE OPERATION	375	PAUSE/PAUSE IN PICTURE/DIGITAL PICTURE OPERATION	385	PICTURE: ONLY RASTER
26	316	NO IMAGE: ONLY LINE	326	PICTURE: ONLY LINE	336	PICTURE: ONLY LINE	346	FLASHING PICTURE	356	FLASHING PICTURE	366	ONLY ONE FIELD PER FRAME BEING	376	FLASHING PICTURE	386	FLASHING PICTURE
27	317	NO IMAGE: ONLY VERTICAL LINE	327	PICTURE: ONLY VERTICAL LINE	337	INCORRECT PARTIALITY OF PICTURE	347	PICTURE SLANTED	357	PICTURE MUTING	367	PICTURE TRANSMISSION	377	FLASHING PICTURE	387	FLASHING PICTURE
28	318	NO IMAGE: ONLY PICTURE	328	PICTURE: ONLY PICTURE	338	PICTURE: ONLY PICTURE	348	OTHER PICTURE NOISE PROBLEM	358	HEAD IMPACT ERROR CAUSING UNSTABLE PICTURE	368	TRANSMISSION	378	FLASHING PICTURE	388	FLASHING PICTURE
29	319	NO IMAGE: ONLY PICTURE PROBLEM	329	PICTURE: ONLY PICTURE PROBLEM	339	V-SIZE INCORRECT	349	OTHER PICTURE NOISE PROBLEM	369	PICTURE: ONLY PICTURE PROBLEM	379	FLASHING PICTURE	389	FLASHING PICTURE	390	FLASHING PICTURE
30	310	NO PICTURE: ONLY PICTURE PROBLEM	320	PICTURE: ONLY PICTURE PROBLEM	340	PICTURE: ONLY PICTURE PROBLEM	350	PICTURE: ONLY PICTURE PROBLEM	360	PICTURE: ONLY PICTURE PROBLEM	370	PICTURE: ONLY PICTURE PROBLEM	380	PICTURE: ONLY PICTURE PROBLEM	390	PICTURE: ONLY PICTURE PROBLEM
31	410	NO COLOUR	420	COLOUR LEVEL PROBLEM	430	POOR COLOUR QUALITY	440	NOISY COLOUR	450	UNSTABLE COLOUR	460	POOR COLOUR RECORDING	470	SPECIAL COLOUR FUNCTION PROBLEM	480	
32	411	NO COLOUR IN E TO E MODE	421	WEAK COLOUR	431	POOR COLOUR MISSING	441	COLOUR NOISE ON A BLACK & WHITE PICTURE	451	COLOUR FLASHING	461	NO COLOUR RECORDING	471	FAULTY AUTOMATIC WHITE BALANCE	481	
33	412	NO COLOUR IN PLAYBACK MODE	422	EXCESSIVE COLOUR	432	POOR WHITE BALANCE	442	COLOUR STREAKING	452	HUE CONSTANTLY CHANGING	462	FAULTY COLOUR EFFECTS FUNCTION	472	FAULTY COLOUR EFFECTS FUNCTION	482	
34	413	NO COLOUR IN VIEWFINDER	423	OTHER COLOUR LEVEL PROBLEM	433	HUE PROBLEM	443	COLOUR NOT LOCKED	453	COLOUR NOT LOCKED	463	OTHER COLOUR RECORDING PROBLEM	473	OTHER COLOUR RECORDING PROBLEM	483	
35	414	NO COLOUR IN PART OF PICTURE	424	OTHER COLOUR LEVEL PROBLEM	434	PICTURE: ONLY COLOUR	444	OTHER COLOUR NOISE PROBLEM	454	OTHER UNSTABLE COLOUR PROBLEM	464	PROBLEM	474	PROBLEM	484	
36	510	NO AUDIO	520	AUDIO LEVEL PROBLEM	530	AUDIO QUALITY	540	NOISY AUDIO	550	UNSTABLE AUDIO	560	POOR AUDIO RECORDING	570	POOR SPECIAL AUDIO FUNCTION PROBLEM	580	STEREO/MULTI MODE OPERATION PROBLEM
37	511	NO SOUND IN E TO E MODE	521	LOW AUDIO LEVEL	531	POOR FREQUENCY RESPONSE	541	HUM	551	JUMPING OR REPEATING AUDIO	561	AUDIO NOT BEING RECORDED	571	FAULTY FADE OPERATION	581	NO STEREO OPERATION
38	512	NO PLAYBACK OF OUTGOING MESSAGE(S)	522	AUDIO LEVEL PROBLEM	532	DISTORTED AUDIO	542	HISS	552	AUDIO PUMPING OR BREATHING	562	NO ERASURE PROTECTION FOR AUDIO	572	FAULTY ECHO OPERATION	582	POOR CHANNEL SEPARATION
39	513	NO PLAYBACK OF INCOMING MESSAGE(S)	523	BALANCE PROBLEM	533	NO OR POOR TREBLE	543	CRACKLE	553	PIZZICATO	563	PREVIOUS AUDIO RECORDING NOT BEING	573	FAULTY ECHO/REVERB OPERATION	583	DIFFERENCE IN PHASE BETWEEN CHANNELS
40	514	OTHER 'NO AUDIO' PROBLEM	524	AUDIO LEVEL PROBLEM	534	NO OR POOR BASS	544	STATIC, POP OR CLICK NOISE	554	WOW AND FLUTTER	564	ERASER	574	FAULTY REPEAT OPERATION	584	PROBLEM WITH SURROUND SOUND MODE
41	515	OTHER 'NO AUDIO' PROBLEM	525	AUDIO LEVEL PROBLEM	535	OTHER AUDIO QUALITY PROBLEM	545	BZZZ	555	HOWLING/ACOUSTIC FEEDBACK	565	AUDIO PROCESSING	575	FAULTY SYNC RECORDING OPERATION	585	PROBLEM WITH PCM AUDIO MODE
42	610	NO MECHANICAL OPERATION	620	IRREGULAR MECHANICAL OPERATION	630	SPEED PROBLEM	640	MECHANICAL NOISE	650		660	DAMAGE TO SOFTWARE	670	MECHANICAL OPERATION PROBLEM	680	LENS PROBLEM
43	611	NO DISC ROTATION	621	IRREGULAR DISC ROTATION	631	SPEED TOO FAST	641	ROTATION NOISE	651	TAPE GETS SCRATCHED	661	FAULTY STOP/START OPERATION	671	FOCUS PROBLEM	681	ZOOM PROBLEM
44	612	NO FORWARD OPERATION	622	IRREGULAR FORWARD	632	SPEED TOO SLOW	642	MOTOR NOISE	652	DISCS GETS SCRATCHED	662	FAULTY REVERSE OPERATION	672	IRIS PROBLEM	682	IRIS PROBLEM
45	613	NO REVERSE OPERATION	623	IRREGULAR REVERSE OPERATION	633	OTHER SPEED PROBLEM	643	WIND NOISE	653	TAPE GETS CHEWED/WRINKLED	663	FAULTY AUTOMATIC PROGRAM SEARCH	673	FAULTY CUE/REVIEW MODE	683	MACRO PROBLEM
46	614	NO FAST FORWARD OR REWIND FUNCTION	624	IRREGULAR FAST FORWARD OR REWIND FUNCTION	634	OTHER SPEED PROBLEM	644	TAPE SQUEALING	654	TAPE JAMMED OR BROKEN	664	FAULTY REVERSE OPERATION	674	FAULTY REVERSE OPERATION	684	OTHER LENS PROBLEM
47	615	NO LOADING	625	IRREGULAR LOADING	635	OTHER SPEED PROBLEM	645	FAIN NOISE	655	TAPE GETS CURLLED	665	FAULTY SLOW MOTION OPERATION	675	FAULTY FADE OPERATION	685	
48	616	NO EJECTING OR EJECTING OF TAPE	626	IRREGULAR UNLOADING OR EJECTING OF TAPE	636	OTHER SPEED PROBLEM	646	DISC SCRATCHES	656	TAPE GETS WRINKLED	666	FAULTY REVERSE OPERATION	676	FAULTY FADE OPERATION	686	
49	617	NO AUTO SHUT-OFF OPERATION	627	IRREGULAR AUTO SHUT-OFF OPERATION	637	NOISY TAPE LOADING	647	DISC SCRATCHES	657	TAPE STICKING	667	FAULTY REPEAT OPERATION	677	FAULTY FADE OPERATION	687	
50	618	TONER CARTRIDGE DOES NOT MOVE	628	IRREGULAR TONER CARTRIDGE OPERATION	638	OTHER MECHANICAL NOISE PROBLEM	648	OTHER MECHANICAL NOISE	658	OTHER SOFTWARE DAMAGE PROBLEM	668	FAULTY RECORD REVIEW MODE	678	FAULTY RECORD REVIEW MODE	688	
51	619	MAGAZINE DOES NOT EJECT	629	IRREGULAR MAGAZINE EJECTION	639	OTHER MECHANICAL NOISE PROBLEM	649	OTHER MECHANICAL NOISE	659	OTHER SOFTWARE DAMAGE PROBLEM	669	FAULTY AMS OPERATION	679	FAULTY AMS OPERATION	689	
52	620	OTHER IRREGULAR MECHANICAL OPERATION PROBLEM	630	IRREGULAR DIRECTION CHANGE	640	OTHER IRREGULAR MECHANICAL OPERATION PROBLEM	650	OTHER IRREGULAR MECHANICAL OPERATION	660	OTHER SOFTWARE DAMAGE PROBLEM	670	OTHER MECHANICAL OPERATION PROBLEM	680	OTHER MECHANICAL OPERATION PROBLEM	690	
53	710	NO DATA PROCESSING	720	FAULTY DATA PROCESSING OPERATION	730	DATA DISPLAY PROBLEM	740	NOISY PRINTING	750		760	DATA READ/ WRITE PROBLEM	770	SPECIAL DATA PROCESSING	780	
54	711	NO INITIAL SCREEN	721	INCORRECT DATA	731	INCORRECT CHARACTER DISPLAY	741	PRINTING POSITION	751	FORMATTING PROBLEM	761	FORMATTING PROBLEM	771	FAULTY SELF-DIAGNOSTIC MODE	781	
55	712	SYSTEM DOES NOT RESET	722	SYSTEM RESET WHILE BEING USED	732	MISSING DISPLAY CHARACTERS	742	LOW PRINT CONTRAST	752	DATA ON STORAGE MEDIUM BEING LOST	762	DATA ON STORAGE MEDIUM BEING LOST	772	FAULTY WORD PROCESSING FUNCTION	782	
56	713	SYSTEM DOES NOT BOOT UP	723	SYSTEM LOCKS OUT/CRASHES	733	FAULTY GRAPHIC DISPLAY	743	EXCESSIVE PRINT CONTRAST	753	FRAME MEMORY PROBLEM	763	DATA ON STORAGE MEDIUM BEING LOST	773	FAULTY GRAPHIC EDIT FUNCTION	783	
57	714	NO OPERATION FROM PLUG-IN MODULE	724	FAULTY OPERATION OF PLUG-IN MODULE	734	FAULTY SWITCHING BETWEEN GRAPHIC/TEXT MODE	744	BLURRED PRINT IMAGE	754	OTHER DATA READ/ WRITE PROBLEM	764	DATA ON STORAGE MEDIUM BEING LOST	774	OTHER 'SPECIAL DATA FUNCTION' PROBLEM	784	
58	715	NO OPERATION FROM OTHER INPUT/OUTPUT	725	FAULTY OPERATION OF OTHER INPUT/OUTPUT	735	FAULTY PROMPT/CURSOR OPERATION	745	DOT MATRIX PRINT	755	OTHER DATA READ/ WRITE PROBLEM	765	DATA ON STORAGE MEDIUM BEING LOST	775		785	
59	716	NO OPERATION FROM OTHER INPUT/OUTPUT	726	FAULTY OPERATION OF OTHER INPUT/OUTPUT	736	DATA DISPLAY COLOUR INCORRECT	746	DOTS MISSING/PRINT IMAGE	756	OTHER DATA READ/ WRITE PROBLEM	766	DATA ON STORAGE MEDIUM BEING LOST	776		786	
60	717	NO DATA STORAGE OPERATION	727	IRREGULAR DATA STORAGE OPERATION	737	DATA DISPLAY COLOUR INCORRECT	747	DOTS MISSING/PRINT IMAGE	757	OTHER DATA READ/ WRITE PROBLEM	767	DATA ON STORAGE MEDIUM BEING LOST	777		787	
61	718	NO DATA COMMUNICATION	728	IRREGULAR DATA COMMUNICATION	738	NO PAGING OR SCROLL MODE	748	DOTS MISSING/PRINT IMAGE	758	OTHER DATA READ/ WRITE PROBLEM	768	DATA ON STORAGE MEDIUM BEING LOST	778		788	
62	719	OTHER 'NO DATA PROCESSING' PROBLEM	729	OTHER 'NO DATA PROCESSING' PROBLEM	739	OTHER DATA DISPLAY PROBLEM	749	DOTS MISSING/PRINT IMAGE	759	OTHER DATA READ/ WRITE PROBLEM	769	DATA ON STORAGE MEDIUM BEING LOST	779		789	
63	810	NO PRINTER OPERATION	820	ERRONEOUS PRINTER OPERATION	830	POOR PRINT QUALITY	840	NOISY PRINTING	850	UNSTABLE PRINTER OPERATION	860	RIBBON/PAPER PROBLEMS	870		880	FAULTY FONT/CHARACTER FUNCTIONS
64	811	NOT PRINTING	821	NO COMMUNICATION WITH PRINTER	831	INCORRECT PRINTING POSITION	841	PRINTING NOISE LINES	851	UNSTABLE PAPER LOADING	861	RIBBON BROKEN	871	INCORRECT CHARACTERS	881	
65	812	NO PAPER NOT LOADING	822	NO PAPER FEED	832	EXCESSIVE PRINT CONTRAST	842	DIRTY PRINTING	852	INCORRECT MULTI-PAPER LOADING	862	RIBBON STUCK/STICKING	872	INCORRECT CHARACTER SIZE	882	
66	813	NO PAPER FEED	823	ERRONEOUS PRINT MODE SWITCHING	833	BLURRED PRINT IMAGE	843	OTHER NOISY PRINTING PROBLEM	853	OTHER UNSTABLE PRINTER OPERATION	863	PAPER DERAILED	873</			

SECTION CODES

ANT	ANTENNA SECTION	HDD	HARD DISC DRIVE	RFU	BOOSTER/RF UNIT
APA	AUDIO PROCESSING/ANALOG	HFS	HIGH FREQUENCY SECTION (RF)	RHD	ROTARY HEAD(S)
APP	AUDIO PROCESSING/DIGITAL	HOL	CASSETTE HOLDER	SFT	SOFTWARE (TAPE, DISC, ETC.)
APP	SIGNAL PROCESSING (ANALOG)	IDS	INFORMATION DISPLAY SECTION	SHD	STATIONARY HEAD(S)
ARM	ARM MECHANISM	IFC	IF-CIRCUIT	SLD	SLED MECHANISM
BCH	BATTERY CHARGE	IMG	IMAGE DISPLAY UNIT	SNS	SENSOR UNIT
BZL	BEZEL	INC	INTERNAL CONNECTOR	SPK	SPEAKER
CBT	CABINET	INP	SIGNAL INPUT SECTION	SRS	SUPPLY REEL SECTION
CHA	CHASSIS	KBD	KEYBOARD (SEPARATE)	STA	STATIC BLOCK
CLK	CLOCK/TIMER SECTION	LDG	LOADING MECHANISM	SVO	SERVO SECTION
CPA	COLOUR PROCESSING/ANALOG	LNM	LENS MECHANISM	SYS	SYSTEM CONTROL SECTION
CPD	COLOUR PROCESSING/DIGITAL	MEM	MEMORY CIRCUIT	TDM	TAPE DRIVE MECHANISM
CRT	PICTURE TUBE	MIC	MICROPHONE SECTION	THR	THREADING MECHANISM
CTR	CONTROL PANEL	OUT	SIGNAL OUTPUT SECTION	TIM	TIMER SECTION
DDM	DISC DRIVE MECHANISM	PFM	PAPER FEED MECHANISM	TNR	TENSION REGULATOR
DFL	DEFLECTION CIRCUIT	PIN	PINCH ROLLER/LEVER	TPT	TAPE PATH
DPR	SIGNAL PROCESSING (DIGITAL)	PRG	PROGRAMMING SECTION	TRS	TAKE-UP REEL SECTION
ERA	ERASE CIRCUIT	PRI	PRINT BLOCK	TUN	TUNING SECTION
EXC	EXTERNAL CONNECTOR	PRT	PROTECTION CIRCUIT	TXT	TEXT PROCESSING
FDD	FLOPPY DISC DRIVE	PSU	POWER SUPPLY	VPA	VIDEO PROCESSING/ANALOG
FLX	FLEXIBLE PCB	PUD	PICK-UP DEVICE	VPD	VIDEO PROCESSING/DIGITAL
FMW	FIRMWARE	PWA	POWER AMP SECTION	VWF	VIEWFINDER
FPK	FOCUS PACK	REM	REMOTE CONTROL SECTION	WIR	LEAD WIRE
HCM	HEAD CARRIAGE MECHANISM	RFM	RIBBON FEED MECHANISM	XXX	CABINET/COSMETIC PARTS

DEFECT CODES

MECHANICAL		ELECTRICAL	
A	WORN OUT	N	EXHAUSTED, LOW EMISSION
B	DIRTY, CLOGGED	O	BURNT, ARCING, MISSING PIXELS
C	MISALIGNED	P	MISALIGNED
D	CUT, BROKEN	Q	SHORT
E	DEFORMED	R	OPEN
F	SNAPPED	S	LEAKING
G	SCRATCHED	T	BAD CONTACT, CONNECTION
H	CRACKED, PEELED, CORRODED	U	OPEN PATTERN
I	LOOSE	V	CRACKED PCB
J	SHAKY, UNSTABLE	W	COLD OR NO SOLDERING
K	LEAKING	X	BRIDGED SOLDERING
L	DRY (NO LUBRICANT)	Y	WRONG COMPONENT
M	FOREIGN OBJECT	Z	MISSING COMPONENT
		1	SOFTWARE BUG

REPAIR CODES

A	REPLACEMENT	N	MAINTENANCE
B	MECHANICAL ALIGNMENT	O	REFURBISHING
C	ELECTRICAL ALIGNMENT	P	PREVENTIVE PARTS REPLACEMENT
D	RESOLDERING	Q	PREVENTIVE ACTION WITHOUT PARTS REPLACEMENT
E	CLEANING	U	EXPLANATION FOR CUSTOMER
F	LUBRICATION	V	ESTIMATION REFUSED
G	REPAIRED ELECTRICAL PARTS	W	ESTIMATION WITH PARTS
H	REPAIRED MECHANICAL PARTS	X	ESTIMATION WITHOUT PARTS
I	S/B MODIFICATION	Y	RETURN WITHOUT REPAIR
J	REMOVED COMPONENT (S)	Z	SET EXCHANGE
K	ADDED COMPONENTS		
L	FUNCTIONAL CHECK		
M	SPECIFICATION MEASUREMENT		

FLAG: INDICATES THE ONE MAJOR SYMPTOM/PART COMBINATION BY '1'

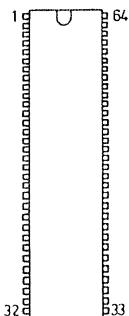
EXAMPLE OF USE :

FLAG	SYMPTOM CODE	PART NO	REF. NO	SECTION/PCB	DEFECT CODE	REPAIR CODE	QTY
1	1 4 1 2 3 6 4 1	1 1 1 1 1 1 1 1 1 1 3 4 5 6 7 8 9 X X	R 1 2 3 . 1 1 1 . .	Y A 2 2 . T D M . .	R C	A B	1 0
.							

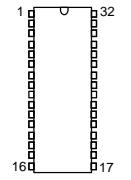
LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS- ABKÜRZUNGEN
LISTA DELLE ABBREVIAZIONI - LISTA DE ABREVIACIONES

- **+USYS:** System voltage
- **+U_VIDEO:** Video drive voltage for the CRT board
- **+ STDBY_ ON:** Standby data (0V standby , 0.6v switched ON)
- **+5V DST:** 5v unregulated voltage from the DST
to supply the tuner and audio MSP device
- **+5V ON:** 5v regulated voltage from the DST
to supply the tuner and audio MSP device
- **+5V UP :** Microprocessor supply voltage
- **BCL:** Beam current limiting information
- **CVBS:** Composite video / luminance signal
- **CVBS_OUT:** Composite video output
- **CVBS_TXT:** Composite video for teletext extraction
- **DEGAUSS:** Degauss signal
- **EW :** East / West
- **FORMAT / BC:** Full white control DATA depending on
16/9 selected format
- **HDRV:** Horizontal deflection signal
- **HTR1 / HTR2:** Heater voltage from the DST to CRT PCB
- **LFB:** Line Fast Blanking
- **MUTE :** Mutes audio amplifiers
- **PO:** “Power ON “ IP95 : reset activated and output = 8v
“PO” = 5v when TV is working in normally
- **POWER_FAIL:** Detection of mains supply and deflection stage failures
- **RESET:** Microprocessor reset signal
- **SAFETY:** Safety information from the deflection stage
- **SCL:** Serial Clock
- **SDA :** Serial Data
- **SIF:** Sound IF
- **TRAP_INFO:** 31.4Mhz IF trap activation
- **U_STANDBY:** Standby voltage
- **U_DRIVER:** Horizontal sync signal from TDA8855H
- **U_TIMER:** 11v voltage used during “Switch ON “ phase
and “Wake Up“ mode
- **V_FLB:** Vertical flyback reference for the microprocessor
- **V_GUARD:** Safety data generated by the vertical amplifier
TDA 8351
- **V_RETTRACE:** 42 / 48volts (depending on tube type) generated by
the DST and used for vertical blanking
- **V_SUPPLY:** 13.5 to 15.5 volts (depending on tube type) generated
by the DST

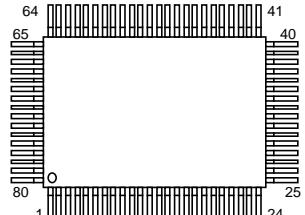
INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE -
CIRCUITS INGRES ET TRANSISTORS
INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN -
CIRCUITI INTEGRATI TRANSISTOR
CIRCUITOS INTEGRADOS Y TRANSISTORES



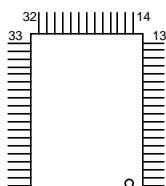
MPS3400C-PP-C6



MX27C200MC-12



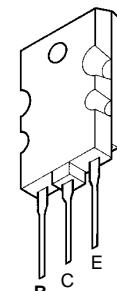
ST92R195



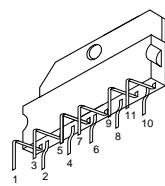
TDA8855H



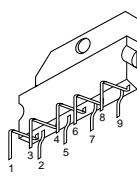
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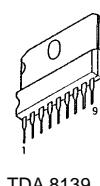
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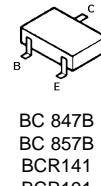
TDA7269



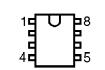
TDA6107Q



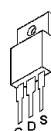
TDA 8139



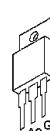
BC 847B
BC 857B
BCR141
BCR191
DTC113ZK
DTC144EK
TN1401



ST24C08-M
TS3702CD



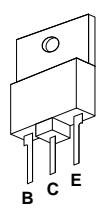
STP6 NA60F1



BT806 -600C



MC7812/CT



BD241C



BC 337
BC 546B
BC 547B



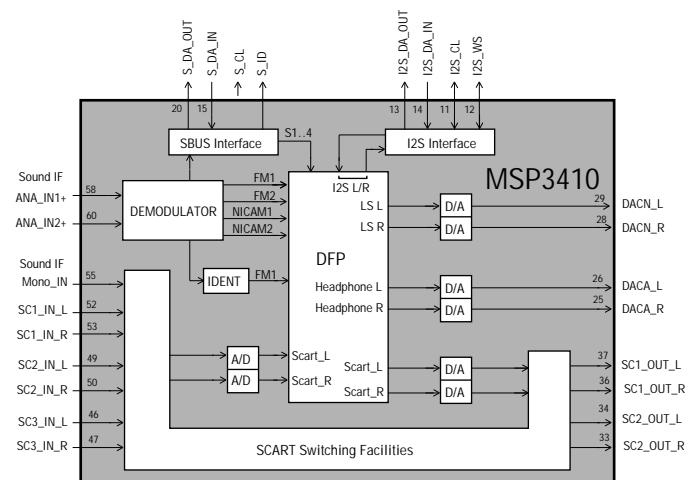
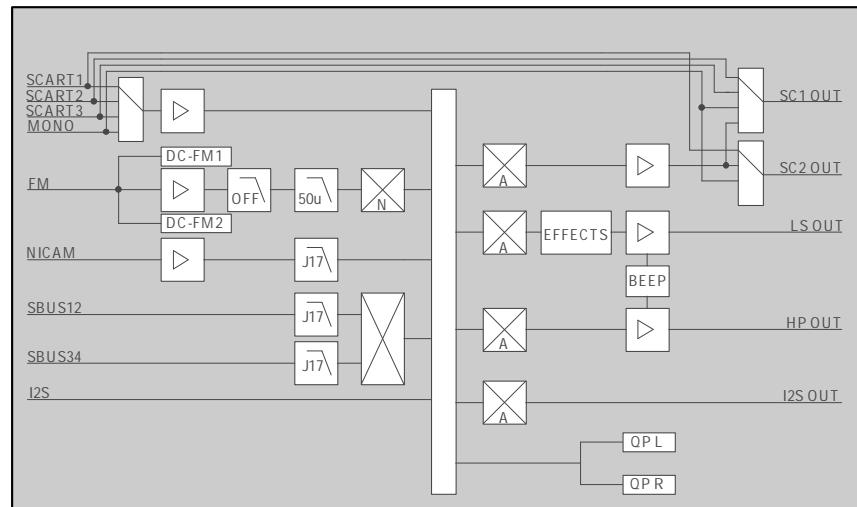
BF 422
BF423
2SA1020Y
2SC2236Y



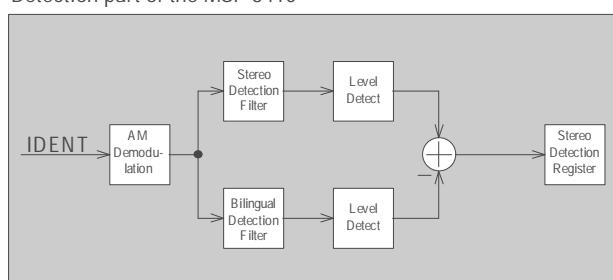
MPS750

**INTEGRATED CIRCUITS BLOCK DIAGRAMS -
SYNOPTIQUES INTERNES DES CIRCUITS INTEGRES -
INTEGRIERTE SCHALTUNGEN BLOCKSCHALTBIHLER
SCHEMA A BLOCCHI DEI CIRCUITI INTEGRATI -
VISTA INTERNA DE LOS CIRCUITOS INTEGRADOS**

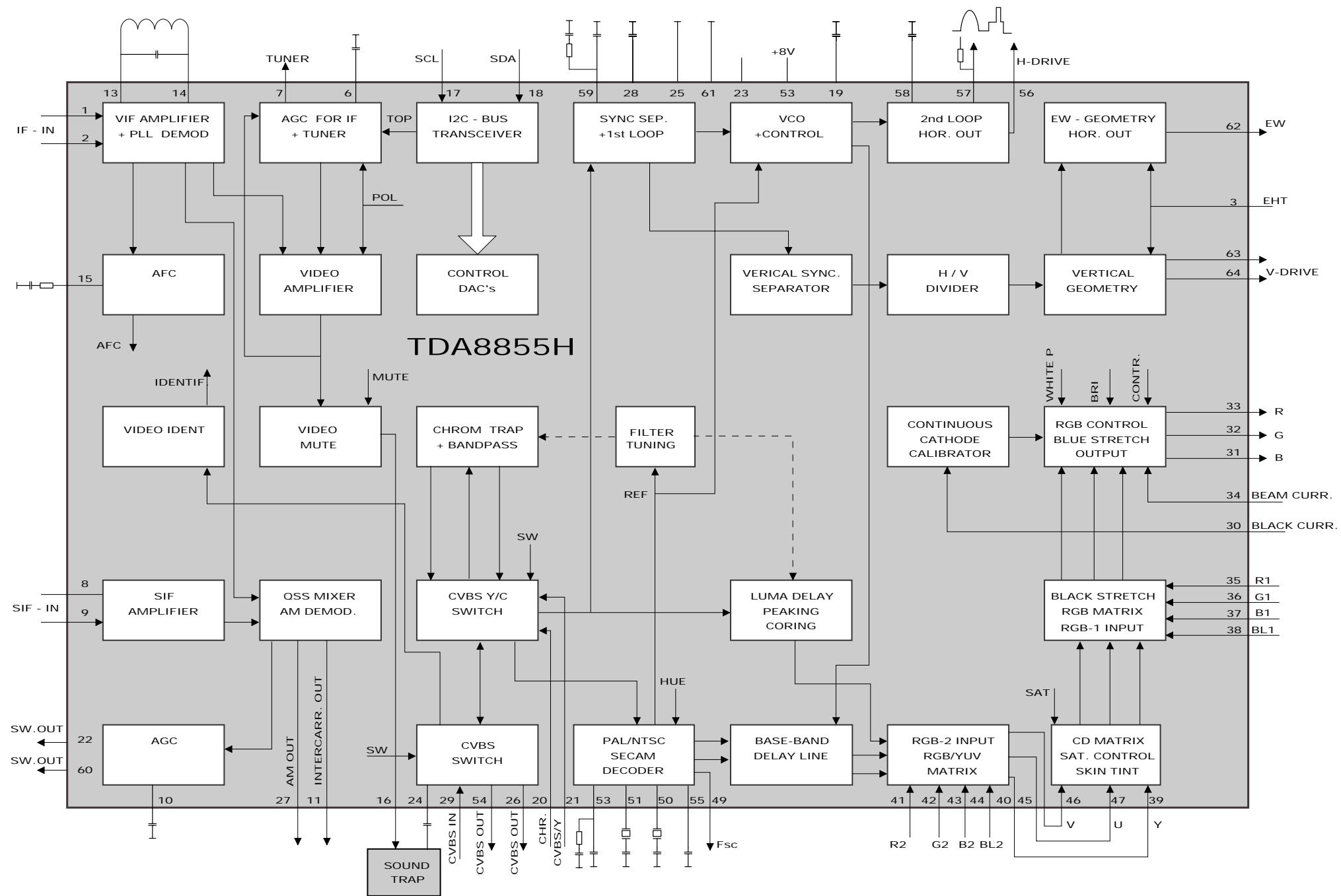
Audio baseband processing of the MSP3410



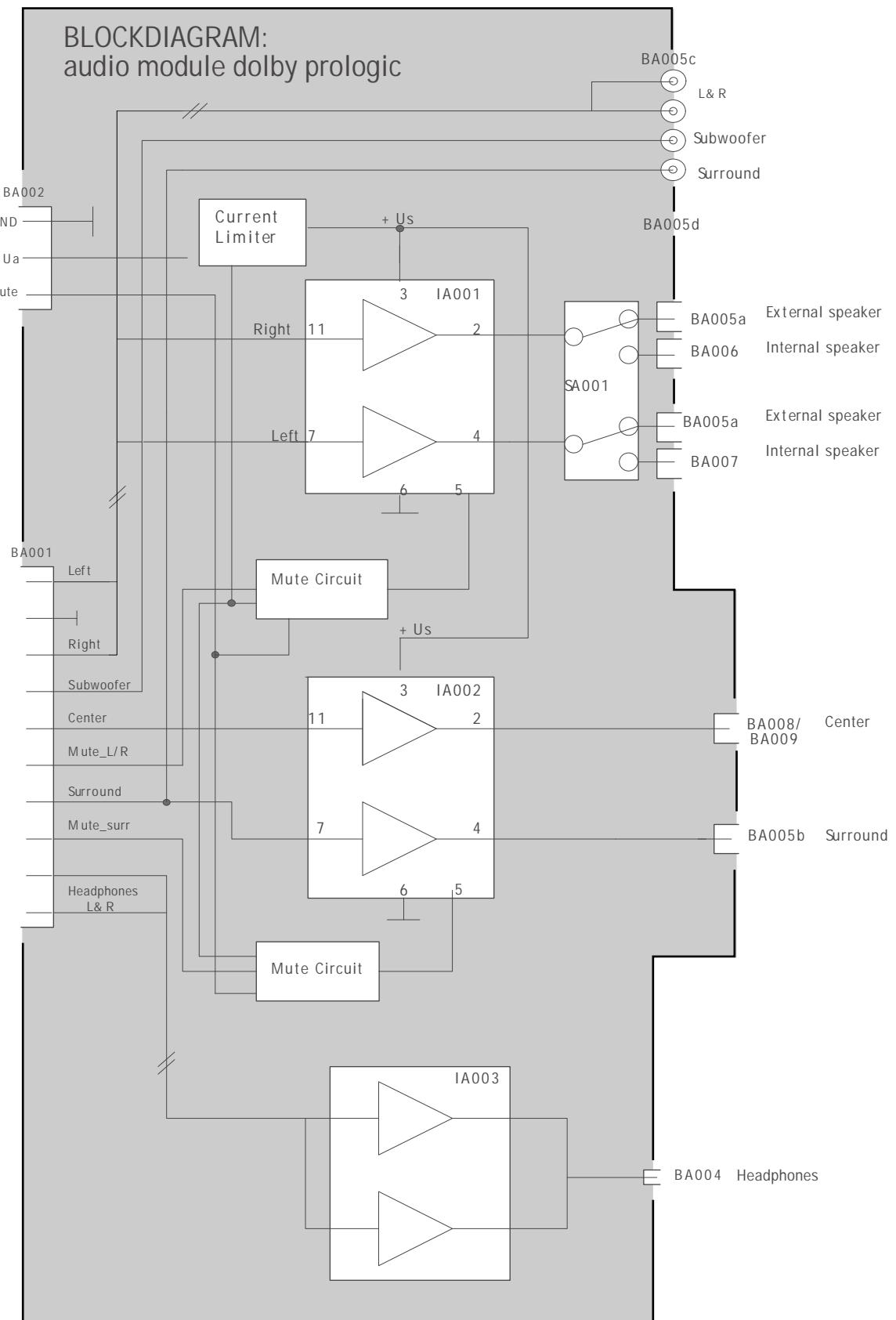
Detection part of the MSP 3410



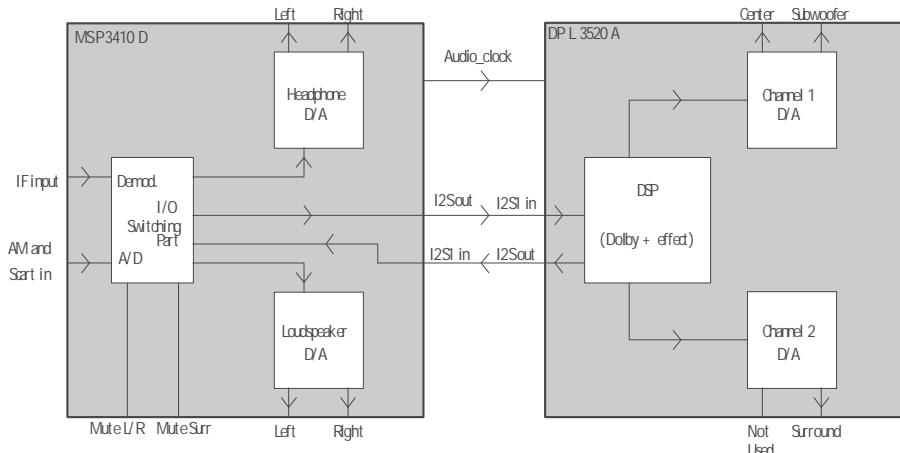
IV01 TDA 8855H



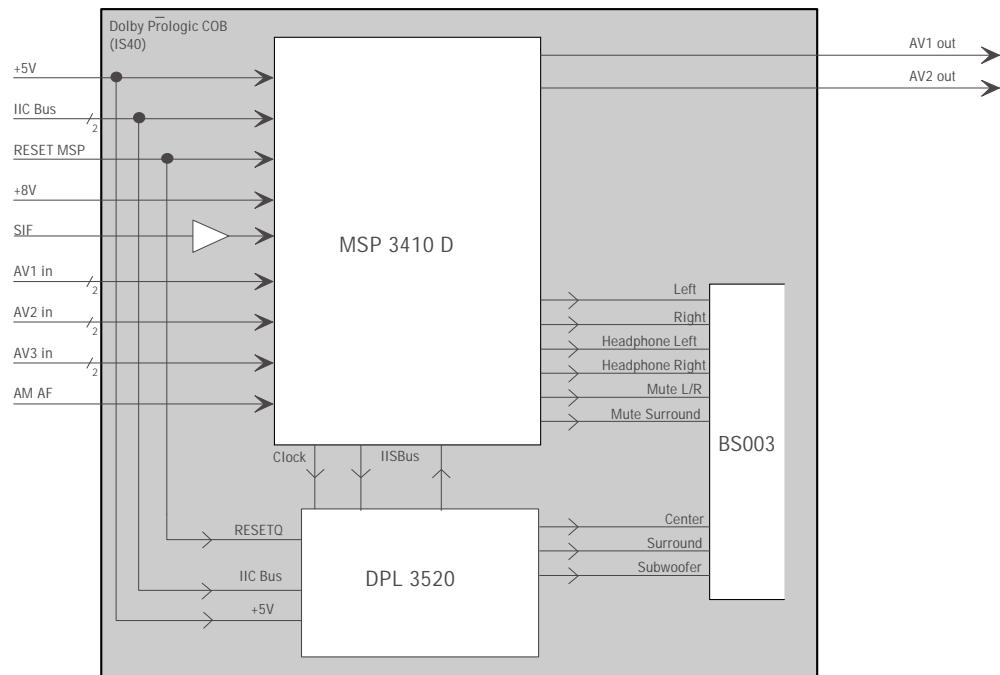
BLOCK DIAGRAM (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA SYNOPTIQUE (AUDIO MODULE DOLBY PROLOGIC)
BLOCKSCHALTBILD (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA A BLOCCI (AUDIO MODULE DOLBY PROLOGIC)
ESQUEMA DE BLOQUES (AUDIO MODULE DOLBY PROLOGIC)



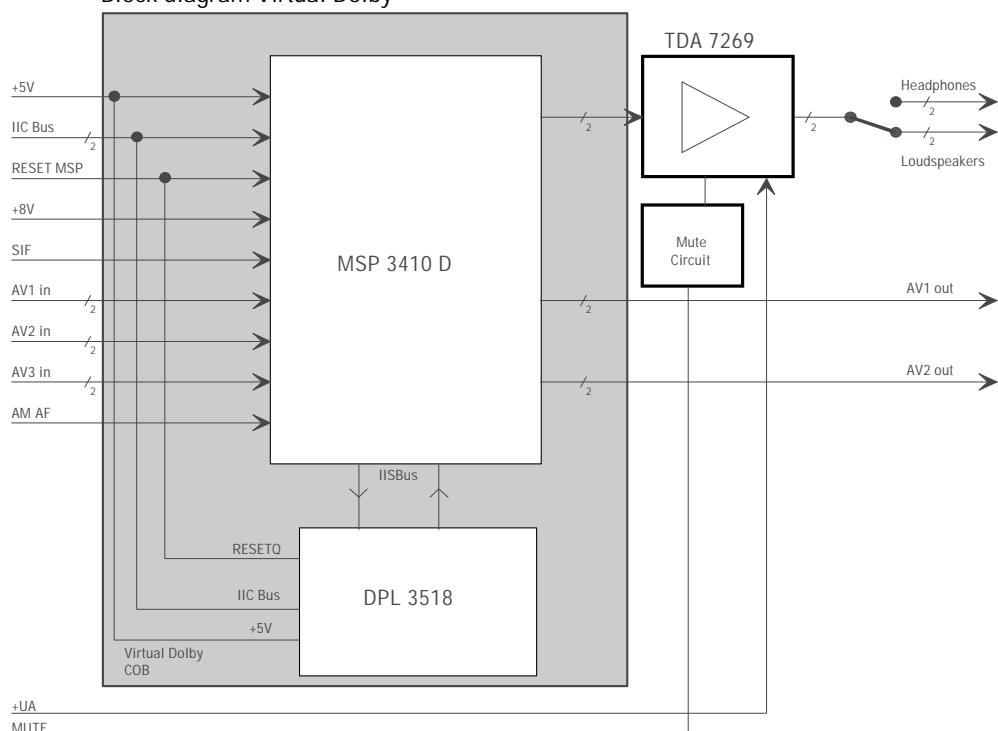
Interface requirement audio part with Dolby Prologic

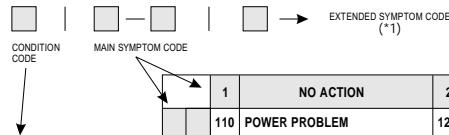


Block diagram Dolby Prologic



Block diagram Virtual Dolby





IRIS REPAIR CODING SYSTEM

SYMPTOM CODE TABLE

	1	NO ACTION	2	LEVEL	3	QUALITY	4	NOISE	5	UNSTABLE	6	RECORDING & PHYSICAL PROBLEMS	7	SPECIAL FUNCTIONS	8	OTHER CONDITIONS
1	110	POWER PROBLEM	120	CHARGING PROBLEM	130	DISPLAY FUNCTION PROBLEM	140	ABNORMAL NOISE	150	REMOTE CONTROL PROBLEM	160	PHYSICAL DAMAGE	170	GENERAL FUNCTION PROBLEM	180	SPECIAL REQUIREMENTS
2	111	NO POWER ON AC	121	NO BATTERY CHARGING	131	FAULTY TIMER/COUNTER DISPLAY	141	CRT DISCHARGING NOISE	151	NO REMOTE CONTROL OPERATION	161	DAMAGED CABINET	171	FAULTY CLOCK FUNCTION	181	TEST AND CHECK
3	113	NO POWER WHEN USING DRY BATTERIES	122	INCOMPLETE BATTERY CHARGE	132	FAULTY LAMP/LED OPERATION	142	EHT DISCHARGING NOISE	152	INCORRECT REMOTE CONTROL OPERATION	162	DAMAGED HANDLE	172	FAULTY SLEEP FUNCTION	182	GENERAL OVERHAUL
4	114	NO POWER WHEN USING RECHARGEABLE BATTERIES	123	OTHER CHARGING PROBLEM	133	FAULTY LEVEL METER OPERATION	143	NOISY CABINET	153	REMOTE CONTROL PROGRAMMING/LEARNING MODE PROBLEM	163	DAMAGED CONTROL KNOB(S)/BUTTON(S)	173	FAULTY TIMER PROGRAMMING	183	SYSTEM/FREQUENCY CONVERSION
5	115	NO POWER FROM SOLAR CELL	124	SHOR OPERATION TIME/SHORT BATTERY LIFE	134	FAULTY ON-SCREEN DISPLAY OPERATION	144	NOISY TRANSFORMER	154	POOR REMOTE CONTROL SENSITIVITY	164	DAMAGED DOOR/COVER	174	FAULTY TIMER RECORDING	184	INITIAL SETUP REQUESTED
6	116	NO POWER WHEN USING A CAR BATTERY	125	SHOR OPERATION TIME/SHORT BATTERY LIFE	135	MECHANICAL TUNING/ANTENNA FAULT	145	NOISY COMPONENT(S)	155	OTHER REMOTE CONTROL PROBLEM	165	DAMAGED PLUG OR SOCKET	175	FAULTY RECORD MUTE OPERATION	185	MOTOR/SHOCK/RECORDING CHANGE
7	117	NO POWER WHEN USING A BATTER	126	SHOR OPERATION TIME/SHORT BATTERY LIFE	136	FAULTY TIME CODE DISPLAY	146	RADIO NOISE	156	FAULTY PROGRAMMED PLAYBACK OPERATION	166	DAMAGED LENS	176	FAULTY PROGRAMMED PLAYBACK OPERATION	186	WRONG SET IN CARTON
8	118	NO POWER-OFF FUNCTION NOT WORKING	127	NO SWITCH-ON FROM STANDBY	137	DISPLAY FUNCTION PROBLEM	147	OTHER ABNORMAL NOISE	157	FAULTY RECORD MUTE OPERATION	167	DAMAGED ANTENNA	177	FAULTY MEMORY FUNCTION	187	OTHER SPECIAL REQUIREMENTS
9	119	NO SWITCH-UP BUT NO OPERATION	128	CYCLIC POWER ON/OFF	138	DISPLAY FUNCTION PROBLEM	148	DISPLAY/DIN	158	MISSING COMPONENT(S) OR ORNAMENTAL PARTS	168	DAMAGED RIBBON/STYLUS	178	OTHER GENERAL FUNCTION PROBLEM	188	SYMPOTM NOT AVAILABLE
10	11X	OTHER POWER PROBLEM			139	OTHER DISPLAY FUNCTION PROBLEM	149	DISPLAY/DIN	159	PRINTED MARKINGS ERASED/PEELED OFF	169	DAMAGED ANTENNA	179	OTHER PHYSICAL DAMAGE		
11	210	NO RECEPTION	220	POOR RECEPTION	230	TRANSMISSION PROBLEM	240	NOISY RECEPTION/TRANSMISSION	250	UNSTABLE RECEPTION/TRANSMISSION	260	TUNING PROBLEM	270	SPECIAL COMMUNICATION PROBLEM	280	SPECIAL RECEPTION PROBLEM
12	211	NO AM RECEPTION	221	POOR FM RECEPTION	231	NO TRANSMISSION	241	LINE NOISE	251	TUNING DRIFT	261	MANUAL TUNING PROBLEM	271	FAULTY DIALLING	281	FAULTY STEREO RECEPTION
13	212	NO FM RECEPTION	222	POOR FM RECEPTION	232	POOR TRANSMISSION	242	OSCILLATION	252	FADING	262	AUTOMATIC TUNING PROBLEM	272	FAULTY CHANNEL SELECTION	282	FAULTY MAIN CHANNEL (A) FUNCTION
14	213	NO SW RECEPTION	223	POOR SW RECEPTION	233	TRANSMISSION LEVEL TOO HIGH	243	INTERSTATION INTERFERENCE	253	OTHER UNSTABLE RECEPTION/TRANSMISSION PROBLEM	263	INCORRECT TUNING	273	FAULTY AUTO-ANALOGUE OPERATION	283	FAULTY SUB-CHANNEL (B) FUNCTION
15	214	NO UHF RECEPTION	224	POOR UHF RECEPTION	234	TRANSMISSION LEVEL TOO LOW	244	OTHER NOISE RECEPTION/TRANSMISSION PROBLEM	254	MEMORY PROBLEM	264	TUNING MEMORY PROBLEM	274	FAULTY AUTO-SELECT	284	FAULTY RECORD READ-OUT FUNCTION
16	215	NO BS RECEPTION	225	POOR BS RECEPTION	235	POOR TRANSMISSION BETWEEN BASE UNIT AND HANDSET	245	OTHER TRANSMISSION PROBLEM	255	OTHER TUNING PROBLEM	265	FAULTY AUTOLOAD MEMORY	275	FAULTY SPEECH PROCESSING	285	FAULTY RDS/TDS OPERATION
17	216	NO CS RECEPTION	226	POOR CS RECEPTION	236	POOR TRANSMISSION BETWEEN BASE UNIT AND HANDSET	246	OTHER TRANSMISSION PROBLEM	256	NO RINGING TONE	266	NO RINGING TONE	276	WEAK RINGING TONE	286	FAULTY TELETEXT/RELAY RECEPTION
18	217	NO HDTV RECEPTION	227	POOR HDTV RECEPTION	237	OTHER 'NO RECEPTION' PROBLEM	247	OTHER TRANSMISSION PROBLEM	257	OTHER SPECIAL COMMUNICATION PROBLEM	267	OTHER SPECIAL COMMUNICATION PROBLEM	277	OTHER SPECIAL RECEPTION PROBLEM	287	FAULTY FAX OPERATION
19	218	NO GPS RECEPTION	228	POOR GPS RECEPTION	238	OTHER 'NO RECEPTION' PROBLEM	248	OTHER TRANSMISSION PROBLEM	258	OTHER SPECIAL RECEPTION PROBLEM	268	OTHER SPECIAL RECEPTION PROBLEM	278	OTHER SPECIAL RECEPTION PROBLEM	288	OTHER SPECIAL RECEPTION PROBLEM
20	310	NO PICTURE	320	PICTURE LEVEL PROBLEM	330	PICTURE QUALITY PROBLEM	340	PICTURE NOISE	350	UNSTABLE PICTURE	360	POOR PICTURE RECORDING	370	SPECIAL PICTURE FUNCTION PROBLEM	380	PICTURE DISPLAY/PICKUP PROBLEM
21	311	NO PICTURE IN E TO E MODE	321	PICTURE TOO DARK	331	POOR PICTURE RESOLUTION	341	SNOWY PICTURE	351	SYNCH PROBLEM	361	NO PICTURE RECORDING	371	EDITING PROBLEM	381	BLINK/MOAN ON DISPLAY/PICKUP
22	312	NO PICTURE IN PLAYBACK MODE	322	PICTURE CONTRAST TOO LOW	332	CONTRAST TOO HIGH	342	POOR FOCUS	352	SCROLL/WIPE/SCRAPER OPERATION	362	NO ERASURE PROTECTION FOR VIDEO	372	SCROLL ON DISPLAY/PICKUP	382	SCROLL ON DISPLAY/PICKUP
23	313	NO PICTURE IN VIEWFINDER	323	PICTURE TOO HIGH	333	SATURATED WHITE OR BLACK LEVEL	343	NOISE BARS ON PICTURE	353	PICTURE PUMPING	363	PREVIOUS VIDEO RECORDING NOT BEING ERASED	373	FAULTY NEGATIVE/POSITIVE SWITCHING FUNCTION	383	DUST/DIRT ON DISPLAY/PICKUP
24	314	NO PICTURE: ONLY RASTER	324	NO RASTER, BLACK PICTURE	334	SATURATED WHITE OR BLACK LEVEL	344	PICTURE JITTER	354	PICTURE SHAKING (HORIZONTAL OR VERTICAL)	364	UNWANTED ERASURE OF PICTURE	374	FAULTY PIPER/PORPHE/TELOP OPERATION	384	PHOSPHOR/PIXEL MISSING ON DISPLAY/PICKUP
25	315	NO PICTURE: ONLY LINE	325	NO PICTURE: ONLY LINE	335	PICTURE ONLY LINE	345	BLANKING PICTURE	355	FLASHING PICTURE	365	PAUSE/PAUSE IN PICTURE/DIGITAL PICTURE OPERATION	375	PAUSE/PAUSE IN PICTURE/DIGITAL PICTURE OPERATION	385	PICTURE ONLY LINE(S) IN PHOSPHOR/PIXEL
26	316	NO PICTURE: ONLY VERTICAL LINE	326	NO PICTURE: ONLY VERTICAL LINE	336	PICTURE ONLY VERTICAL LINE	346	FLASHING PICTURE	356	PICTURE MUTING	366	ONE ONLY FIELD PER FRAME BEING RECORDED	376	PICTURE FAULTY PICTURE TRANSMISSION	386	PICTURE FAULTY PICTURE TRANSMISSION
27	317	NO PICTURE: ONLY 'PICTURE' PROBLEM	327	NO PICTURE: ONLY 'PICTURE' PROBLEM	337	INCORRECT CENTRING OF PICTURE	347	HEAD IMPACT ERROR	357	PICTURE FLICKER	367	FAULTY PICTURE FAULT	377	FAULTY GENLOCK FUNCTION	387	PICTURE FAULTY GENLOCK FUNCTION
28	318	NO PICTURE: ONLY 'PICTURE' PROBLEM	328	NO PICTURE: ONLY 'PICTURE' PROBLEM	338	PICTURE SLANTED	348	IMPACT ERROR	358	PICTURE FAULTY FLASH/STROBE FUNCTION	368	FAULTY FLASH/STROBE FUNCTION	378	PICTURE FAULTY FLASH/STROBE FUNCTION	388	PICTURE FAULTY AUTO-EDIT FUNCTION
29	319	NO PICTURE: ONLY 'PICTURE' PROBLEM	329	NO PICTURE: ONLY 'PICTURE' PROBLEM	339	V-SIZE INCORRECT	349	IMPACT ERROR	360	PICTURE FAULTY PICTURE FUNCTION	370	PICTURE FAULTY PICTURE FUNCTION	380	PICTURE FAULTY PICTURE FUNCTION	390	PICTURE FAULTY PICTURE FUNCTION
30	31X	NO PICTURE: ONLY 'PICTURE' PROBLEM			340	H-SIZE INCORRECT	350	PICTURE FAULTY PICTURE FUNCTION	361	PICTURE FAULTY PICTURE FUNCTION	371	PICTURE FAULTY PICTURE FUNCTION	381	PICTURE FAULTY PICTURE FUNCTION	391	PICTURE FAULTY PICTURE FUNCTION
31	410	NO COLOUR	420	COLOUR LEVEL PROBLEM	430	POOR COLOUR QUALITY	440	NOISY COLOUR	450	UNSTABLE COLOUR	460	POOR COLOUR RECORDING	470	SPECIAL COLOUR FUNCTION PROBLEM	480	
32	411	NO COLOUR IN E TO E MODE	421	WEAK COLOUR	431	SOME OR ALL COLOURS MISSING	441	COLOUR NOISE ON A BLACK & WHITE PICTURE	451	COLOUR FLASHING	461	NO COLOUR RECORDING	471	FAULTY AUTOMATIC WHITE BALANCE	481	
33	412	NO COLOUR IN PLAYBACK MODE	422	EXCESSIVE COLOUR	432	POOR WHITE BALANCE	442	COLOUR STREAKING	452	HUE CONSTANTLY CHANGING	462	FAULTY COLOUR EFFECTS FUNCTION	472	FAULTY COLOUR EFFECTS FUNCTION	482	
34	413	NO COLOUR IN VIEWFINDER	423	OTHER COLOUR LEVEL PROBLEM	433	HUE PROBLEM	443	COLOUR NOT LOCKED	453	COLOUR NOT LOCKED	463	OTHER COLOUR RECORDING PROBLEM	473	OTHER SPECIAL COLOUR FUNCTION PROBLEM	483	
35	414	NO COLOUR IN PART OF PICTURE	424	OTHER COLOUR LEVEL PROBLEM	434	SHADING/ADJUSTMENT ERROR	444	OTHER COLOUR NOISE PROBLEM	454	OTHER UNSTABLE COLOUR PROBLEM	464		474		484	
36	41X	NO COLOUR: ONLY 'COLOUR' PROBLEM			435	CONVERGENCE ERROR	445		455		465		475		485	
37	510	NO AUDIO	520	AUDIO LEVEL PROBLEM	530	AUDIO QUALITY	540	NOISY AUDIO	550	UNSTABLE AUDIO	560	POOR AUDIO RECORDING	570	POOR SPECIAL AUDIO FUNCTION PROBLEM	580	STEREO/MULTI MODE OPERATION PROBLEM
38	511	NO SOUND IN E TO E MODE	521	LOW AUDIO LEVEL	531	POOR FREQUENCY RESPONSE	541	HUM	551	JUMPING OR REPEATING AUDIO	561	AUDIO NOT BEING RECORDED	571	FAULTY FADE OPERATION	581	NO STEREO OPERATION
39	512	NO PLAYBACK OF OUTGOING MESSAGE(S)	522	AUDIO LEVEL PROBLEM	532	DISTORTED AUDIO	542	HISS	552	AUDIO PUMPING OR BREATHING	562	NO ERASURE PROTECTION FOR AUDIO	572	FAULTY ECHO OPERATION	582	POOR CHANNEL SEPARATION
40	513	NO PLAYBACK OF INCOMING MESSAGE(S)	523	BALANCE PROBLEM	533	NO OR POOR TREBLE	543	CRACKLE	553	PICTURE FAULTY	563	PREVIOUS AUDIO RECORDING NOT BEING ERASED	573	FAULTY ECHO/ECALIBRATION	583	DISTANCE IN PHASE BETWEEN CHANNELS
41	51X	OTHER 'NO AUDIO' PROBLEM			534	NO OR POOR BASS	544	STATIC, POP OR CLICK NOISE	554	PICTURE FAULTY	564	UNWANTED ERASURE OF AUDIO	574	FAULTY REPEAT MODE OPERATION	584	PROBLEM WITH SURROUND SOUND MODE
42	521	LOW AUDIO LEVEL	531	AUDIO LEVEL PROBLEM	541	NOISY AUDIO	551	WOW AND FLUTTER	565	MESSAGE NOT BEING RECORDED	575	FAULTY AUTO PROCESSING	585	PROBLEM WITH PCM AUDIO MODE		
43	522	AUDIO LEVEL PROBLEM	532	BALANCE PROBLEM	542	PICTURE FAULTY	552	HOWLING/ACOUSTIC FEEDBACK	566	OTHER AUDIO RECORDING PROBLEM	576	FAULTY SYNC RECORDING OPERATION	586	OTHER STEREO/MULTI MODE PROBLEM		
44	523	BALANCE PROBLEM	533	AUDIO LEVEL PROBLEM	543	PICTURE FAULTY	553	PICTURE FAULTY	567	FAULTY DBDRS/OPERATION	577	FAULTY REPEAT MODE OPERATION	587	OTHER STEREO/MULTI MODE PROBLEM		
45	524	AUDIO LEVEL PROBLEM	534	AUDIO LEVEL PROBLEM	544	PICTURE FAULTY	554	PICTURE FAULTY	568	FAULTY REPEAT MODE OPERATION	578	OTHER STEREO/MULTI MODE PROBLEM	588	OTHER STEREO/MULTI MODE PROBLEM		
46	525	AUDIO LEVEL PROBLEM	535	AUDIO LEVEL PROBLEM	545	PICTURE FAULTY	555	PICTURE FAULTY	569	OTHER STEREO/MULTI MODE PROBLEM	579	OTHER STEREO/MULTI MODE PROBLEM	589	OTHER STEREO/MULTI MODE PROBLEM		
47	526	AUDIO LEVEL PROBLEM	536	AUDIO LEVEL PROBLEM	546	PICTURE FAULTY	556	PICTURE FAULTY	570	OTHER STEREO/MULTI MODE PROBLEM	580	OTHER STEREO/MULTI MODE PROBLEM	590	OTHER STEREO/MULTI MODE PROBLEM		
48	527	AUDIO LEVEL PROBLEM	537	AUDIO LEVEL PROBLEM	547	PICTURE FAULTY	557	PICTURE FAULTY	571	OTHER STEREO/MULTI MODE PROBLEM	581	OTHER STEREO/MULTI MODE PROBLEM	591	OTHER STEREO/MULTI MODE PROBLEM		
49	528	AUDIO LEVEL PROBLEM	538	AUDIO LEVEL PROBLEM	548	PICTURE FAULTY	558	PICTURE FAULTY	572	OTHER STEREO/MULTI MODE PROBLEM	582	OTHER STEREO/MULTI MODE PROBLEM	592	OTHER STEREO/MULTI MODE PROBLEM		
50	529	AUDIO LEVEL PROBLEM	539	AUDIO LEVEL PROBLEM	549	PICTURE FAULTY	559	PICTURE FAULTY	573	OTHER STEREO/MULTI MODE PROBLEM	583	OTHER STEREO/MULTI MODE PROBLEM	593	OTHER STEREO/MULTI MODE PROBLEM		
51	610	NO MECHANICAL OPERATION	620	IRREGULAR MECHANICAL OPERATION	630	SPEED PROBLEM	640	MECHANICAL NOISE	650		660	DAMAGE TO SOFTWARE	670	MECHANICAL OPERATION PROBLEM	680	LENS PROBLEM
52	621	NO DISC ROTATION	631	IRREGULAR MECHANICAL OPERATION	641	ROTATION NOISE	651	TAPE GETS SCRATCHED	661	FAULTY STOP/START OPERATION	671	FOCUS PROBLEM	681	ZOOM PROBLEM		
53	622	NO FORWARD OPERATION	632	IRREGULAR MECHANICAL OPERATION	642	MOTOR NOISE	662	DISCS GETS SCRATCHED	672	FAULTY REVERSE OPERATION	682	IRIS PROBLEM				
54	623	NO REVERSE OPERATION	633	IRREGULAR MECHANICAL OPERATION	643	WIND NOISE	663	TAPE GETS CHEWED/WRINKLED	673	FAULTY AUTOMATIC PROGRAM SEARCH	683	MACRO PROBLEM				
55	624	NO FAST FORWARD OR REWIND FUNCTION	634	IRREGULAR MECHANICAL OPERATION	644	TAPE SQUEALING	664	TAPE JAMMED OR BROKEN	674	FAULTY CUE/REVIEW MODE	684	OTHER LENS PROBLEM				
56	625	NO LOADING	635	IRREGULAR MECHANICAL OPERATION	645	FAIN NOISE	665	TAPE GETS CURLLED	675	FAULTY SLOW MOTION OPERATION	685					
57	626	NO UNLOADING OR EJECTING OF TAPE	636	IRREGULAR MECHANICAL OPERATION	646	DISC SCRATCHING	666	TAPE GETS WRINKLED	676	FAULTY FADE MODE	686					
58	627	NO AUTO SHUT-OFF OPERATION	637	IRREGULAR MECHANICAL OPERATION	647	NOISY TAPE LOADING	667	TAPE STICKING	677	FAULTY REPEAT OPERATION	687					
59	628	TONER CARTRIDGE DOES NOT MOVE	638	IRREGULAR MECHANICAL OPERATION	648	OTHER MECHANICAL NOISE PROBLEM	668	OTHER SOFTWARE DAMAGE PROBLEM	678	FAULTY RECORD REVIEW MODE	688					
60	629	TONER CARTRIDGE DOES NOT EJECT	639	IRREGULAR MECHANICAL OPERATION					679	FAULTY RECORD REVIEW MODE	689					
61	62A	MAGNETIC CARTRIDGE DOES NOT EJECT	640	IRREGULAR MECHANICAL OPERATION					680	FAULTY AMS OPERATION	690					
62	62B	IRREGULAR DIRECTION CHANGE	641	IRREGULAR MECHANICAL OPERATION					691	OTHER MECHANICAL OPERATION PROBLEM	692					
63	62C	OTHER IRREGULAR MECHANICAL OPERATION PROBLEM							693		694					
64	710	NO DATA PROCESSING	720	FAULTY DATA PROCESSING OPERATION	730	DATA DISPLAY PROBLEM	740	NOISY PRINTING	750		760	DATA READ/WHITE PROBLEM	770	SPECIAL DATA PROCESSING	780	
65	721	NO INITIAL SCREEN	731	INCORRECT DATA	741	INCORRECT CHARACTER DISPLAY	751	FORMATTING PROBLEM	761	FORMATTING PROBLEM	771	FAULTY SELF-DIAGNOSTIC MODE	781			
66	722	SYSTEM DOES NOT RESET	732	SYSTEM RESET WHILE BEING USED	742	MISSING DISPLAY CHARACTERS	752	DATA ON STORAGE MEDIUM BEING LOST	762	DATA ON STORAGE MEDIUM BEING LOST	772	FAULTY WORD PROCESSING FUNCTION	782			
67	723	SYSTEM DOES NOT BOOT UP	733	SYSTEM LOCKS OUT/CRASHES	743	FAULTY GRAPHIC DISPLAY	753	FRAME MEMORY PROBLEM	763	FRAME MEMORY PROBLEM	773	FAULTY GRAPHIC EDIT FUNCTION	783			
68	724	NO OPERATION FROM PLUG-IN MODULE	734	PROGRAMMING PROBLEM	744	FAULTY SWITCHING BETWEEN GRAPHIC/TEXT MODE	754	OTHER DATA READ/WHITE PROBLEM	764	OTHER DATA READ/WHITE PROBLEM	774	OTHER 'SPECIAL DATA FUNCTION' PROBLEM	784			
69	725	NO OPERATION FROM OTHER INPUT/OUTPUT	735	PROGRAMMING PROBLEM	745	FAULTY PROMPT/CURSOR OPERATION	755	DATA DISPLAY COLOUR INCORRECT	765	DATA DISPLAY COLOUR INCORRECT	775		785			
70	726	NO OPERATION FROM OTHER INPUT/OUTPUT	736	PROGRAMMING PROBLEM	746	FAULTY PROMPT/CURSOR OPERATION	756	NO PAGING								

SECTION CODES

ANT	ANTENNA SECTION	HDD	HARD DISC DRIVE	RFU	BOOSTER/RF UNIT
APA	AUDIO PROCESSING/ANALOG	HFS	HIGH FREQUENCY SECTION (RF)	RHD	ROTARY HEAD(S)
APP	AUDIO PROCESSING/DIGITAL	HOL	CASSETTE HOLDER	SFT	SOFTWARE (TAPE, DISC, ETC.)
APP	SIGNAL PROCESSING (ANALOG)	IDS	INFORMATION DISPLAY SECTION	SHD	STATIONARY HEAD(S)
ARM	ARM MECHANISM	IFC	IF-CIRCUIT	SLD	SLED MECHANISM
BCH	BATTERY CHARGE	IMG	IMAGE DISPLAY UNIT	SNS	SENSOR UNIT
BZL	BEZEL	INC	INTERNAL CONNECTOR	SPK	SPEAKER
CBT	CABINET	INP	SIGNAL INPUT SECTION	SRS	SUPPLY REEL SECTION
CHA	CHASSIS	KBD	KEYBOARD (SEPARATE)	STA	STATIC BLOCK
CLK	CLOCK/TIMER SECTION	LDG	LOADING MECHANISM	SVO	SERVO SECTION
CPA	COLOUR PROCESSING/ANALOG	LNM	LENS MECHANISM	SYS	SYSTEM CONTROL SECTION
CPD	COLOUR PROCESSING/DIGITAL	MEM	MEMORY CIRCUIT	TDM	TAPE DRIVE MECHANISM
CRT	PICTURE TUBE	MIC	MICROPHONE SECTION	THR	THREADING MECHANISM
CTR	CONTROL PANEL	OUT	SIGNAL OUTPUT SECTION	TIM	TIMER SECTION
DDM	DISC DRIVE MECHANISM	PFM	PAPER FEED MECHANISM	TNR	TENSION REGULATOR
DFL	DEFLECTION CIRCUIT	PIN	PINCH ROLLER/LEVER	TPT	TAPE PATH
DPR	SIGNAL PROCESSING (DIGITAL)	PRG	PROGRAMMING SECTION	TRS	TAKE-UP REEL SECTION
ERA	ERASE CIRCUIT	PRI	PRINT BLOCK	TUN	TUNING SECTION
EXC	EXTERNAL CONNECTOR	PRT	PROTECTION CIRCUIT	TXT	TEXT PROCESSING
FDD	FLOPPY DISC DRIVE	PSU	POWER SUPPLY	VPA	VIDEO PROCESSING/ANALOG
FLX	FLEXIBLE PCB	PUD	PICK-UP DEVICE	VPD	VIDEO PROCESSING/DIGITAL
FMW	FIRMWARE	PWA	POWER AMP SECTION	VWF	VIEWFINDER
FPK	FOCUS PACK	REM	REMOTE CONTROL SECTION	WIR	LEAD WIRE
HCM	HEAD CARRIAGE MECHANISM	RFM	RIBBON FEED MECHANISM	XXX	CABINET/COSMETIC PARTS

DEFECT CODES

MECHANICAL		ELECTRICAL	
A	WORN OUT	N	EXHAUSTED, LOW EMISSION
B	DIRTY, CLOGGED	O	BURNT, ARCING, MISSING PIXELS
C	MISALIGNED	P	MISALIGNED
D	CUT, BROKEN	Q	SHORT
E	DEFORMED	R	OPEN
F	SNAPPED	S	LEAKING
G	SCRATCHED	T	BAD CONTACT, CONNECTION
H	CRACKED, PEELED, CORRODED	U	OPEN PATTERN
I	LOOSE	V	CRACKED PCB
J	SHAKY, UNSTABLE	W	COLD OR NO SOLDERING
K	LEAKING	X	BRIDGED SOLDERING
L	DRY (NO LUBRICANT)	Y	WRONG COMPONENT
M	FOREIGN OBJECT	Z	MISSING COMPONENT
		1	SOFTWARE BUG

REPAIR CODES

A	REPLACEMENT	N	MAINTENANCE
B	MECHANICAL ALIGNMENT	O	REFURBISHING
C	ELECTRICAL ALIGNMENT	P	PREVENTIVE PARTS REPLACEMENT
D	RESOLDERING	Q	PREVENTIVE ACTION WITHOUT PARTS REPLACEMENT
E	CLEANING	U	EXPLANATION FOR CUSTOMER
F	LUBRICATION	V	ESTIMATION REFUSED
G	REPAIRED ELECTRICAL PARTS	W	ESTIMATION WITH PARTS
H	REPAIRED MECHANICAL PARTS	X	ESTIMATION WITHOUT PARTS
I	S/B MODIFICATION	Y	RETURN WITHOUT REPAIR
J	REMOVED COMPONENT (S)	Z	SET EXCHANGE
K	ADDED COMPONENTS		
L	FUNCTIONAL CHECK		
M	SPECIFICATION MEASUREMENT		

FLAG: INDICATES THE ONE MAJOR SYMPTOM/PART COMBINATION BY '1'

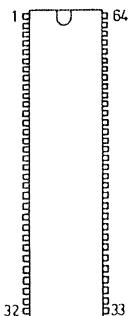
EXAMPLE OF USE :

FLAG	SYMPTOM CODE	PART NO	REF. NO	SECTION/PCB	DEFECT CODE	REPAIR CODE	QTY
1	1 4 1 2 3 6 4 1	1 1 1 1 1 1 1 1 1 1 3 4 5 6 7 8 9 X X	R 1 2 3 . 1 1 1 . .	Y A 2 2 . T D M . .	R C	A B	1 0
.							

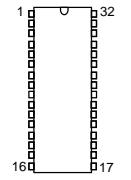
LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS- ABKÜRZUNGEN
LISTA DELLE ABBREVIAZIONI - LISTA DE ABREVIACIONES

- **+USYS:** System voltage
- **+U_VIDEO:** Video drive voltage for the CRT board
- **+ STDBY_ ON:** Standby data (0V standby , 0.6v switched ON)
- **+5V DST:** 5v unregulated voltage from the DST
to supply the tuner and audio MSP device
- **+5V ON:** 5v regulated voltage from the DST
to supply the tuner and audio MSP device
- **+5V UP :** Microprocessor supply voltage
- **BCL:** Beam current limiting information
- **CVBS:** Composite video / luminance signal
- **CVBS_OUT:** Composite video output
- **CVBS_TXT:** Composite video for teletext extraction
- **DEGAUSS:** Degauss signal
- **EW :** East / West
- **FORMAT / BC:** Full white control DATA depending on
16/9 selected format
- **HDRV:** Horizontal deflection signal
- **HTR1 / HTR2:** Heater voltage from the DST to CRT PCB
- **LFB:** Line Fast Blanking
- **MUTE :** Mutes audio amplifiers
- **PO:** “Power ON “ IP95 : reset activated and output = 8v
“PO” = 5v when TV is working in normally
- **POWER_FAIL:** Detection of mains supply and deflection stage failures
- **RESET:** Microprocessor reset signal
- **SAFETY:** Safety information from the deflection stage
- **SCL:** Serial Clock
- **SDA :** Serial Data
- **SIF:** Sound IF
- **TRAP_INFO:** 31.4Mhz IF trap activation
- **U_STANDBY:** Standby voltage
- **U_DRIVER:** Horizontal sync signal from TDA8855H
- **U_TIMER:** 11v voltage used during “Switch ON “ phase
and “Wake Up“ mode
- **V_FLB:** Vertical flyback reference for the microprocessor
- **V_GUARD:** Safety data generated by the vertical amplifier
TDA 8351
- **V_RETTRACE:** 42 / 48volts (depending on tube type) generated by
the DST and used for vertical blanking
- **V_SUPPLY:** 13.5 to 15.5 volts (depending on tube type) generated
by the DST

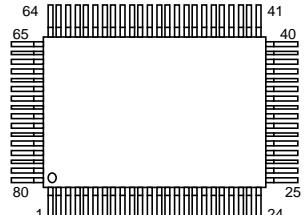
INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE -
CIRCUITS INGRES ET TRANSISTORS
INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN -
CIRCUITI INTEGRATI TRANSISTOR
CIRCUITOS INTEGRADOS Y TRANSISTORES



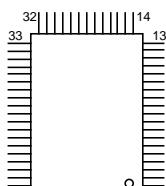
MPS3400C-PP-C6



MX27C200MC-12



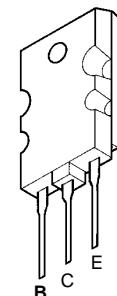
ST92R195



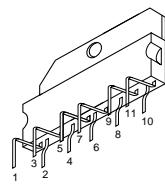
TDA8855H



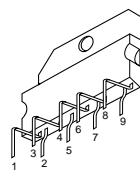
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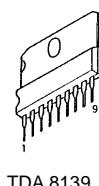
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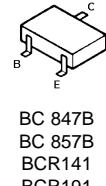
TDA7269



TDA6107Q



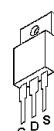
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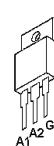
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BC 857B
BCR141
BCR191
DTC113ZK
DTC144EK
TN1401



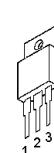
ST24C08-M
TS3702CD



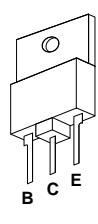
STP6 NA60F1



BT806 -600C



MC7812/CT



BD241C



BC 337
BC 546B
BC 547B



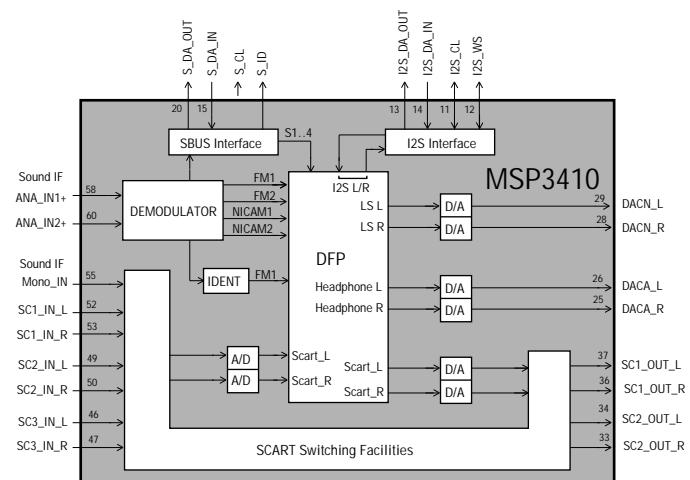
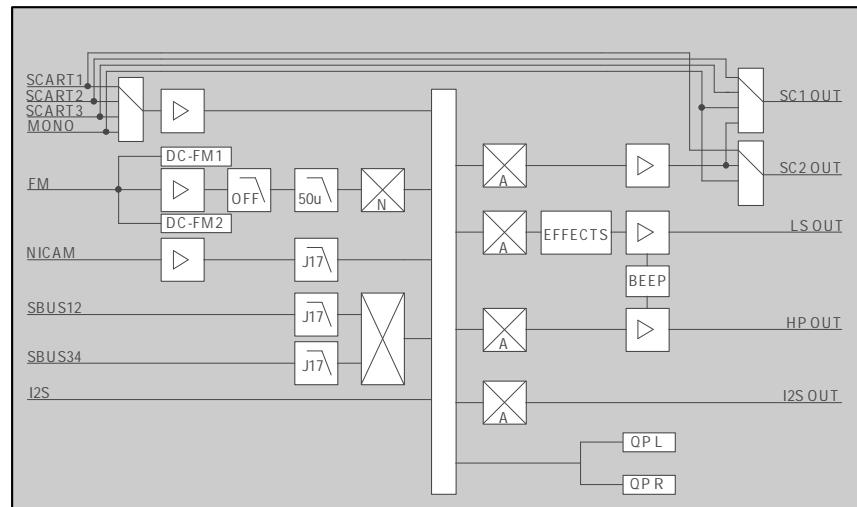
BF 422
BF423
2SA1020Y
2SC2236Y



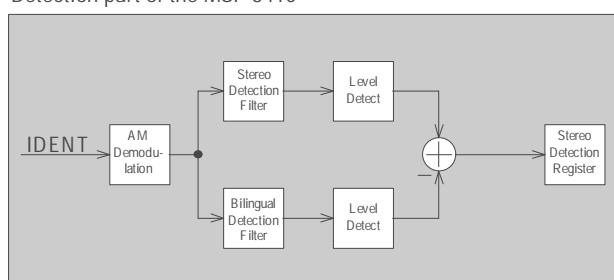
MPS750

**INTEGRATED CIRCUITS BLOCK DIAGRAMS -
SYNOPTIQUES INTERNES DES CIRCUITS INTEGRES -
INTEGRIERTE SCHALTUNGEN BLOCKSCHALTBIHLER
SCHEMA A BLOCCHI DEI CIRCUITI INTEGRATI -
VISTA INTERNA DE LOS CIRCUITOS INTEGRADOS**

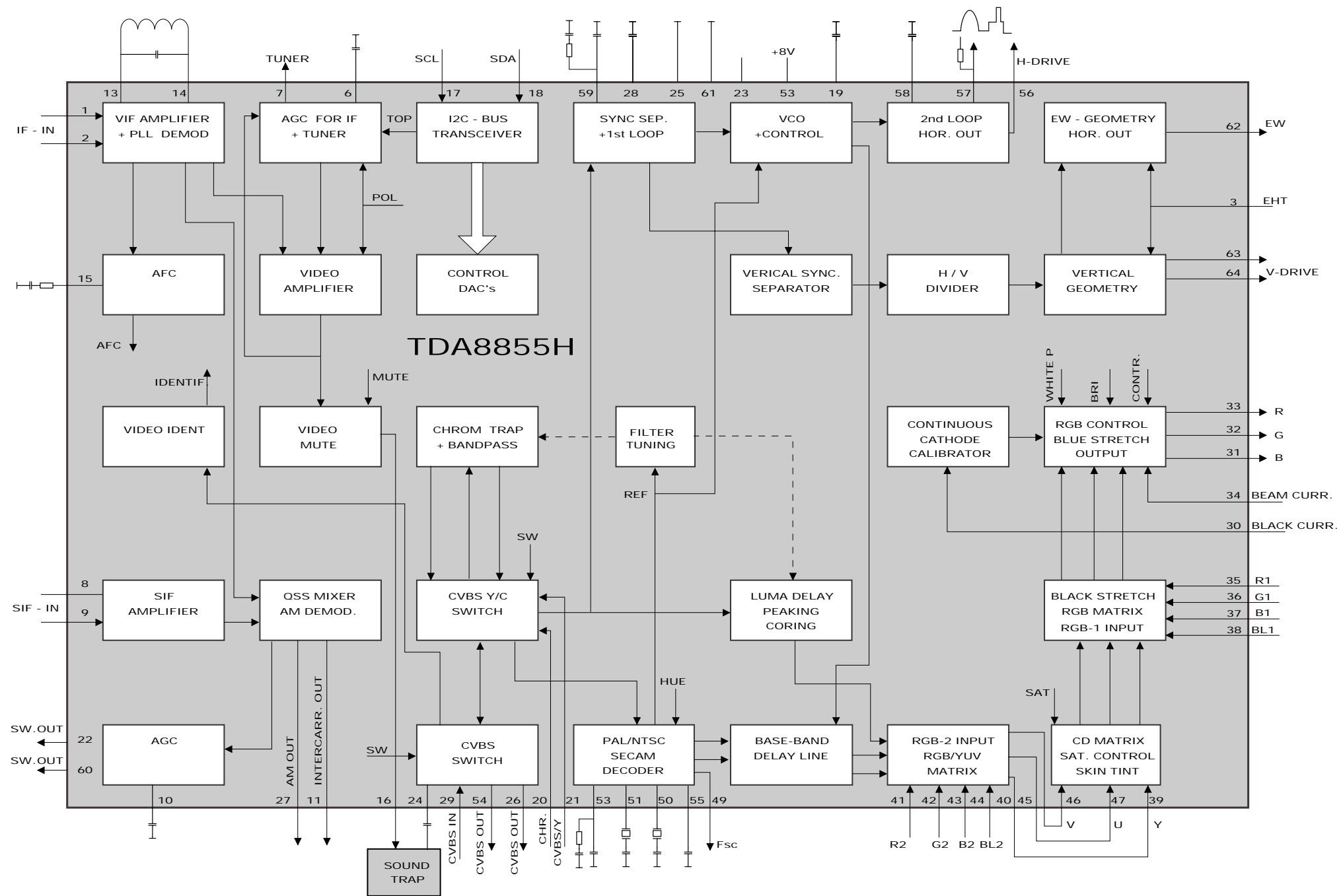
Audio baseband processing of the MSP3410



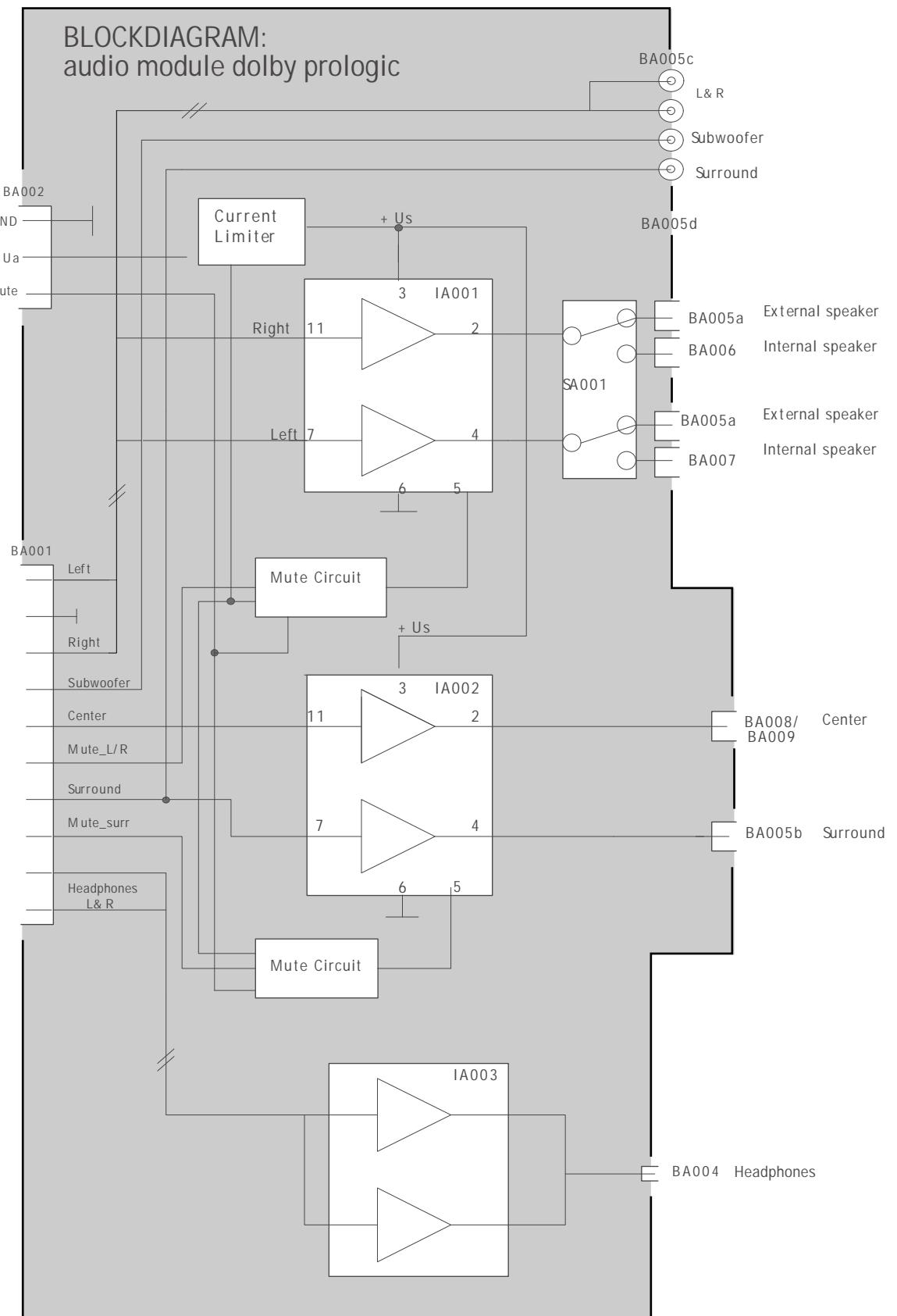
Detection part of the MSP 3410



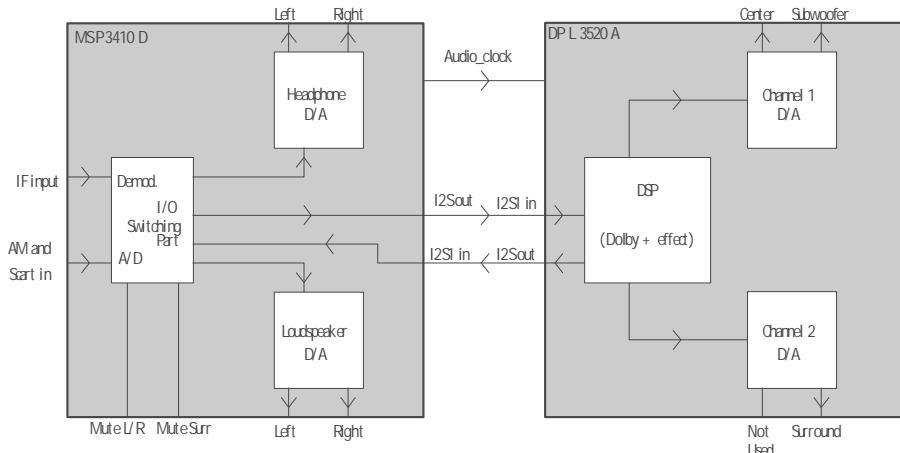
IV01 TDA 8855H



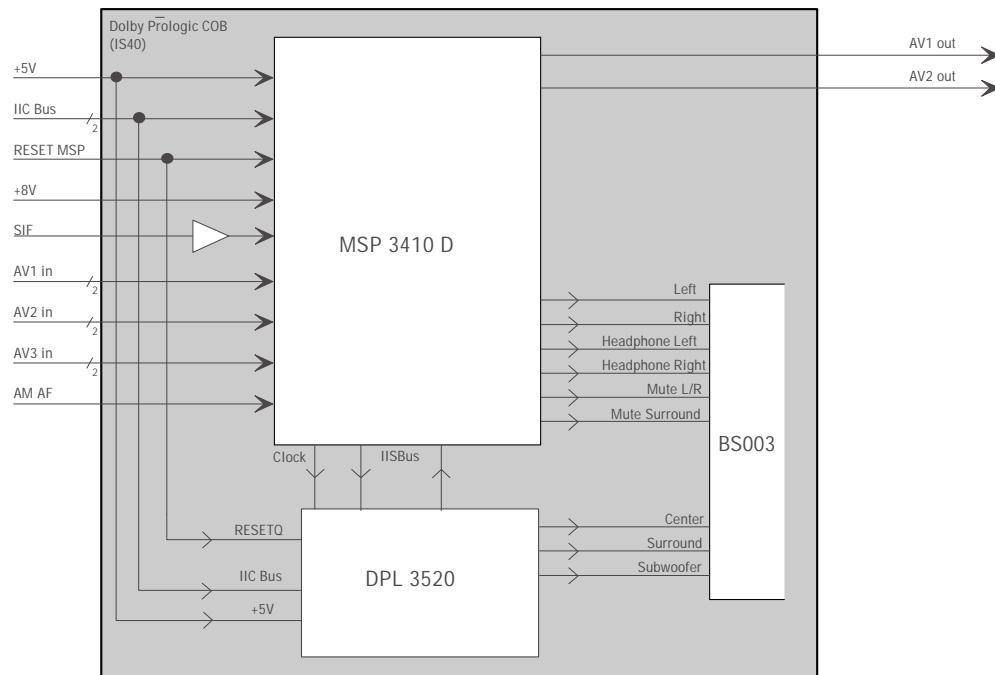
BLOCK DIAGRAM (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA SYNOPTIQUE (AUDIO MODULE DOLBY PROLOGIC)
BLOCKSCHALTBILD (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA A BLOCCI (AUDIO MODULE DOLBY PROLOGIC)
ESQUEMA DE BLOQUES (AUDIO MODULE DOLBY PROLOGIC)



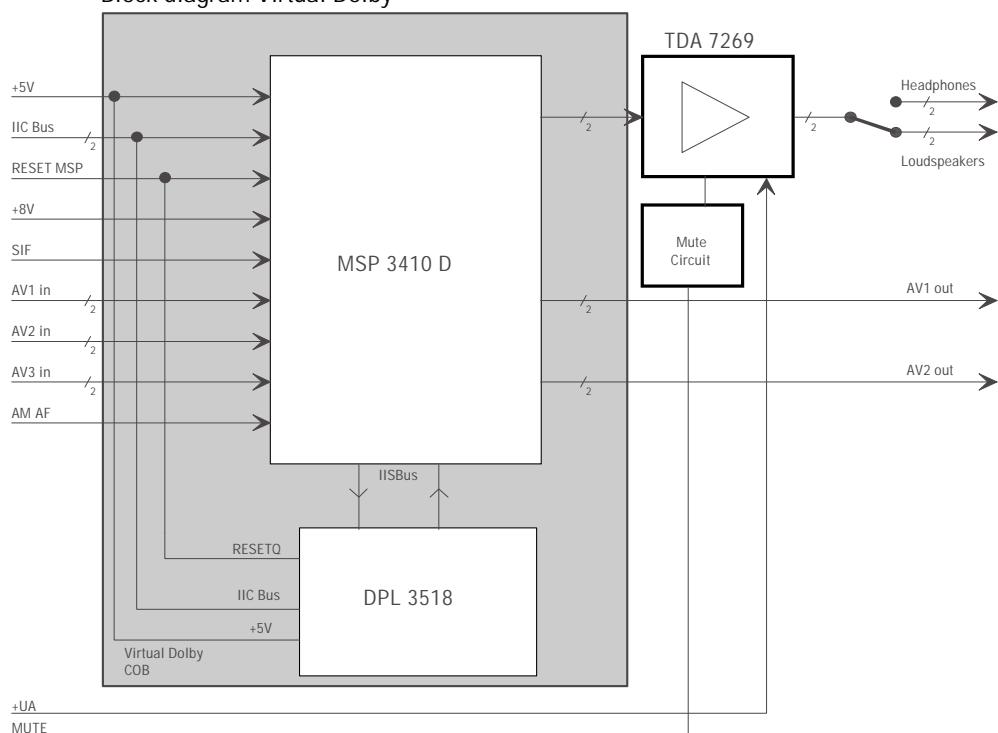
Interface requirement audio part with Dolby Prologic

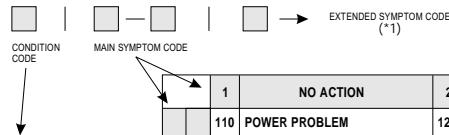


Block diagram Dolby Prologic



Block diagram Virtual Dolby





IRIS REPAIR CODING SYSTEM

SYMPTOM CODE TABLE

	1	NO ACTION	2	LEVEL	3	QUALITY	4	NOISE	5	UNSTABLE	6	RECORDING & PHYSICAL PROBLEMS	7	SPECIAL FUNCTIONS	8	OTHER CONDITIONS
1	110	POWER PROBLEM	120	CHARGING PROBLEM	130	DISPLAY FUNCTION PROBLEM	140	ABNORMAL NOISE	150	REMOTE CONTROL PROBLEM	160	PHYSICAL DAMAGE	170	GENERAL FUNCTION PROBLEM	180	SPECIAL REQUIREMENTS
2	111	NO POWER ON AC	121	NO BATTERY CHARGING	131	FAULTY TIMER/COUNTER DISPLAY	141	CRT DISCHARGING NOISE	151	NO REMOTE CONTROL OPERATION	161	DAMAGED CABINET	171	FAULTY CLOCK FUNCTION	181	TEST AND CHECK
3	113	NO POWER WHEN USING DRY BATTERIES	122	INCOMPLETE BATTERY CHARGE	132	FAULTY LAMP/LED OPERATION	142	EHT DISCHARGING NOISE	152	INCORRECT REMOTE CONTROL OPERATION	162	DAMAGED HANDLE	172	FAULTY SLEEP FUNCTION	182	GENERAL OVERHAUL
4	114	NO POWER WHEN USING RECHARGEABLE BATTERIES	123	OTHER CHARGING PROBLEM	133	FAULTY LEVEL METER OPERATION	143	NOISY CABINET	153	REMOTE CONTROL PROGRAMMING/LEARNING MODE PROBLEM	163	DAMAGED CONTROL KNOB(S)/BUTTON(S)	173	FAULTY TIMER PROGRAMMING	183	SYSTEM/FREQUENCY CONVERSION
5	115	NO POWER FROM SOLAR CELL	124	SHORt OPERATION TIME/SHORT BATTERY LIFE	134	FAULTY ON-SCREEN DISPLAY OPERATION	144	NOISY TRANSFORMER	154	POOR REMOTE CONTROL SENSITIVITY	164	DAMAGED DOOR/COVER	174	FAULTY TIMER RECORDING	184	INITIAL SETUP REQUESTED
6	116	NO POWER WHEN USING A CAR BATTERY	125	SHORt OPERATION TIME/SHORT BATTERY LIFE	135	MECHANICAL TUNING/ANTENNA FAULT	145	NOISY COMPONENT(S)	155	OTHER REMOTE CONTROL PROBLEM	165	DAMAGED PLUG OR SOCKET	175	FAULTY RECORD MUTE OPERATION	185	MOTOR/SHOCK/RECORD/CHANGE
7	117	NO POWER WHEN USING A CAR BATTERY	126	SHORt OPERATION TIME/SHORT BATTERY LIFE	136	FAULTY TIME CODE DISPLAY	146	RADIO NOISE	156	FAULTY PROGRAMMED PLAYBACK OPERATION	166	DAMAGED LENS	176	FAULTY PROGRAMMED PLAYBACK	186	WRONG SET IN CARTON
8	118	NO POWER-OFF FUNCTION NOT WORKING	127	NO SWITCH-ON FROM STANDBY	137	DISPLAY FUNCTION FAULT	147	OTHER ABNORMAL NOISE	157	OPERATION	167	DAMAGED ANTENNA	177	FAULTY MEMORY FUNCTION	187	OTHER SPECIAL REQUIREMENTS
9	119	NO POWER-OFF FUNCTION NOT WORKING	128	POWERS UP BUT NO OPERATION	138	DISPLAY FAULT	148	DISPLAY/DIM	158	MISSING COMPONENT(S)	168	DAMAGED ANTENNA OR STYLUS	178	OTHER GENERAL FUNCTION PROBLEM	188	SYMPtOM NOT AVAILABLE
10	110	OTHER POWER PROBLEM	129	OTHER POWER PROBLEM	139	OTHER DISPLAY FUNCTION PROBLEM	149	DISPLAY/DIM	169	PRINTED MARKINGS ERASED/PEELED OFF	170	PRINTED MARKINGS ERASED/PEELED OFF	189	OTHER PHYSICAL DAMAGE	190	
11	210	NO RECEPTION	220	POOR RECEPTION	230	TRANSMISSION PROBLEM	240	NOISY RECEPTION/TRANSMISSION	250	UNSTABLE RECEPTION/TRANSMISSION	260	TUNING PROBLEM	270	SPECIAL COMMUNICATION PROBLEM	280	SPECIAL RECEPTION PROBLEM
12	211	NO AM RECEPTION	221	POOR FM RECEPTION	231	NO TRANSMISSION	241	LINE NOISE	251	TUNING DRIFT	261	MANUAL TUNING PROBLEM	271	FAULTY DIALLING	281	FAULTY STEREO RECEPTION
13	212	NO FM RECEPTION	222	POOR FM RECEPTION	232	POOR TRANSMISSION	242	OSCILLATION	252	FADING	262	AUTOMATIC TUNING PROBLEM	272	FAULTY CHANNEL SELECTION	282	FAULTY MAIN CHANNEL (A) FUNCTION
14	213	NO SW RECEPTION	223	POOR SW RECEPTION	233	TRANSMISSION LEVEL TOO HIGH	243	INTERSTATION INTERFERENCE	253	OTHER UNSTABLE RECEPTION/TRANSMISSION PROBLEM	263	INCORRECT TUNING	273	FAULTY ANTI-ANNEALING OPERATION	283	FAULTY SUB-CHANNEL (B) FUNCTION
15	214	NO UHF RECEPTION	224	POOR UHF RECEPTION	234	TRANSMISSION LEVEL TOO LOW	244	OTHER NOISE RECEPTION/TRANSMISSION PROBLEM	254	MEMORY PROBLEM	264	TUNING MEMORY PROBLEM	274	FAULTY TONE READING-OUT FUNCTION	284	FAULTY TONE READING-OUT FUNCTION
16	215	NO BS RECEPTION	225	POOR BS RECEPTION	235	POOR TRANSMISSION BETWEEN BASE UNIT AND HANDSET	245	OTHER TRANSMISSION PROBLEM	255	OTHER TUNING PROBLEM	265	FAULTY AUTOLOAD MEMORY	275	FAULTY AUTOLOAD MEMORY	285	FAULTY REMOTE OPERATION
17	216	NO CS RECEPTION	226	POOR CS RECEPTION	236	POOR TRANSMISSION BETWEEN BASE UNIT AND HANDSET	246	OTHER TRANSMISSION PROBLEM	256	FAULTY SPEECH PROCESSING	266	NO RINGING TONE	276	FAULTY TELETEXT RECEPTION	286	FAULTY SATELLITE/LR/TY RECEPTION
18	217	NO HDTV RECEPTION	227	POOR HDTV RECEPTION	237	OTHER 'NO RECEPTION' PROBLEM	247	OTHER TRANSMISSION PROBLEM	257	WEAK RINGING TONE	267	OTHER SPECIAL COMMUNICATION PROBLEM	277	OTHER SPECIAL COMMUNICATION PROBLEM	287	FAULTY FAX OPERATION
19	218	NO GPS RECEPTION	228	POOR GPS RECEPTION	238	OTHER 'NO RECEPTION' PROBLEM	248	OTHER TRANSMISSION PROBLEM	258	OTHER UNSTABLE RECEPTION PROBLEM	268	OTHER SPECIAL RECEPTION PROBLEM	278	OTHER SPECIAL RECEPTION PROBLEM	288	
20	310	NO PICTURE	320	PICTURE LEVEL PROBLEM	330	PICTURE QUALITY PROBLEM	340	PICTURE NOISE	350	UNSTABLE PICTURE	360	POOR PICTURE RECORDING	370	SPECIAL PICTURE FUNCTION PROBLEM	380	PICTURE DISPLAY/PICKUP PROBLEM
21	311	NO PICTURE IN E TO E MODE	321	PICTURE TOO DARK	331	POOR PICTURE RESOLUTION	341	SNOWY PICTURE	351	SYNCH PROBLEM	361	NO PICTURE RECORDING	371	EDITING PROBLEM	381	BLURRY IMAGE ON DISPLAY/PICKUP
22	312	NO PICTURE IN PLAYBACK MODE	322	PICTURE CONTRAST TOO LOW	332	CONTRAST TOO HIGH	342	POOR FOCUS	352	SCREACH/WIPER OPERATION	362	NO ERASURE PROTECTION FOR VIDEO	372	SCREACH/WIPER OPERATION	382	SCREACH/WIPER OPERATION
23	313	NO PICTURE IN VIEWFINDER	323	PICTURE TOO HIGH	333	PICTURE TOO HIGH	343	PICTURE JITTER	353	PICTURE PUMPING	363	PREVIOUS VIDEO RECORDING NOT BEING ERASED	373	FAULTY NEGATIVE/POSITIVE SWITCHING FUNCTION	383	DISPLAY ON DISPLAY/PICKUP
24	314	NO PICTURE: ONLY RASTER	324	PICTURE: ONLY RASTER	334	SATURATED WHITE OR BLACK LEVEL	344	BLANKING LINES ON PICTURE	354	PICTURE SHAKING (HORIZONTAL OR VERTICAL)	364	UNWANTED ERASURE OF PICTURE	374	FAULTY PERI-MORSE/TELOP OPERATION	384	PHOSPHOR/PIXEL MISSING ON DISPLAY/PICKUP
25	315	NO RASTER: BLACK PICTURE	325	PICTURE: ONLY RASTER	335	PICTURE: ONLY RASTER	345	BEATING OF PICTURE	355	FLASHING PICTURE	365	PAUSE IN PICTURE IN DIGITAL PICTURE OPERATION	375	PAUSE IN PICTURE IN DIGITAL PICTURE OPERATION	385	PAUSE IN PICTURE IN DIGITAL PICTURE OPERATION
26	316	NO IMAGE: ONLY LINE	326	PICTURE: ONLY LINE	336	PICTURE: ONLY LINE	346	FLASHING PICTURE	356	FLASHING PICTURE	366	ONLY ONE FIELD PER FRAME BEING RECORDED	376	PICTURE TRANSMISSION	386	PICTURE TRANSMISSION
27	317	NO IMAGE: ONLY VERTICAL LINE	327	PICTURE: ONLY VERTICAL LINE	337	INCORRECT PARTIALITY OF PICTURE	347	PICTURE SLANTED	357	PICTURE MUTING	367	FAULTY PICTURE ERASURE	377	FAULTY GENLOCK FUNCTION	387	FAULTY GENLOCK FUNCTION
28	318	NO IMAGE: ONLY PICTURE	328	PICTURE: ONLY PICTURE	338	PICTURE: ONLY PICTURE	348	OVERMODULATION NOISE	358	HEAD IMPACT ERROR CAUSING UNSTABLE PICTURE	368	FAULTY GENLOCK FUNCTION	378	FAULTY FLASH/STROBE FUNCTION	388	FAULTY FLASH/STROBE FUNCTION
29	319	NO IMAGE: ONLY PICTURE PROBLEM	329	PICTURE: ONLY PICTURE PROBLEM	339	V-SIZE INCORRECT	349	OTHER PICTURE NOISE PROBLEM	359	W-SIZE INCORRECT	369	FAULTY DIGITAL PICTURE FUNCTION	379	FAULTY DIGITAL PICTURE FUNCTION	389	FAULTY AUTO-EDIT FUNCTION
30	320	PICTURE: ONLY PICTURE PROBLEM	330	PICTURE: ONLY PICTURE PROBLEM	340	H-SIZE INCORRECT	350	OTHER 'UNSTABLE PICTURE' PROBLEM	360	OTHER PICTURE RECORDING PROBLEM	370	OTHER PICTURE RECORDING PROBLEM	380	OTHER PICTURE RECORDING PROBLEM	390	OTHER PICTURE RECORDING PROBLEM
31	410	NO COLOUR	420	COLOUR LEVEL PROBLEM	430	POOR COLOUR QUALITY	440	NOISY COLOUR	450	UNSTABLE COLOUR	460	POOR COLOUR RECORDING	470	SPECIAL COLOUR FUNCTION PROBLEM	480	
32	411	NO COLOUR IN E TO E MODE	421	WEAK COLOUR	431	POOR COLOUR MISSING	441	COLOUR NOISE ON A BLACK & WHITE PICTURE	451	COLOUR FLASHING	461	NO COLOUR RECORDING	471	FAULTY AUTOMATIC WHITE BALANCE	481	
33	412	NO COLOUR IN PLAYBACK MODE	422	EXCESSIVE COLOUR	432	POOR WHITE BALANCE	442	COLOUR STREAKING	452	HUE CONSTANTLY CHANGING	462	FAULTY COLOUR EFFECTS FUNCTION	472	FAULTY COLOUR EFFECTS FUNCTION	482	
34	413	NO COLOUR IN VIEWFINDER	423	OTHER COLOUR LEVEL PROBLEM	433	HUE PROBLEM	443	COLOUR NOT LOCKED	453	COLOUR NOT LOCKED	463	OTHER SPECIAL COLOUR FUNCTION PROBLEM	473	OTHER SPECIAL COLOUR FUNCTION PROBLEM	483	
35	414	NO COLOUR IN PART OF PICTURE	424	OTHER COLOUR LEVEL PROBLEM	434	PICTURE: ONLY COLOUR	444	OTHER COLOUR NOISE PROBLEM	454	OTHER UNSTABLE COLOUR PROBLEM	464		474		484	
36	510	NO AUDIO	520	AUDIO LEVEL PROBLEM	530	AUDIO QUALITY	540	NOISY AUDIO	550	UNSTABLE AUDIO	560	POOR AUDIO RECORDING	570	POOR SPECIAL AUDIO FUNCTION PROBLEM	580	STEREO/MULTI MODE OPERATION PROBLEM
37	511	NO SOUND IN E TO E MODE	521	LOW AUDIO LEVEL	531	POOR FREQUENCY RESPONSE	541	HUM	551	JUMPING OR REPEATING AUDIO	561	AUDIO NOT BEING RECORDED	571	FAULTY FADE OPERATION	581	NO STEREO OPERATION
38	512	NO PLAYBACK OF OUTGOING MESSAGE(S)	522	AUDIO LEVEL PROBLEM	532	DISTORTED AUDIO	542	HISS	552	AUDIO PUMPING OR BREATHING	562	NO ERASURE PROTECTION FOR AUDIO	572	FAULTY ECHO OPERATION	582	POOR CHANNEL SEPARATION
39	513	NO PLAYBACK OF INCOMING MESSAGE(S)	523	BALANCE PROBLEM	533	NO OR POOR TREBLE	543	CRACKLE	553	PIZZICATO	563	PREVIOUS AUDIO RECORDING NOT BEING ERASED	573	FAULTY ECHO/ECALATION OPERATION	583	DIFFERENCE IN PHASE BETWEEN CHANNELS
40	514	OTHER 'NO AUDIO' PROBLEM	524	AUDIO LEVEL PROBLEM	534	NO OR POOR BASS	544	STATIC, POP OR CLICK NOISE	554	WOW AND FLUTTER	564	UNWANTED ERASURE OF AUDIO MESSAGE NOT BEING RECORDED	574	FAULTY REPEAT MODE OPERATION	584	PROBLEM WITH SURROUND SOUND MODE
41	515	OTHER 'NO AUDIO' PROBLEM	525	AUDIO LEVEL PROBLEM	535	OTHER AUDIO QUALITY PROBLEM	545	BZZZ	555	HOWLING/ACOUSTIC FEEDBACK	565	FAULTY SYNC RECORDING OPERATION	575	FAULTY DBDOWN OPERATION	585	PROBLEM WITH PCM AUDIO MODE
42	610	NO MECHANICAL OPERATION	620	IRREGULAR MECHANICAL OPERATION	630	SPEED PROBLEM	640	MECHANICAL NOISE	650		660	DAMAGE TO SOFTWARE	670	MECHANICAL OPERATION PROBLEM	680	LENS PROBLEM
43	611	NO DISC ROTATION	621	IRREGULAR DISC ROTATION	631	SPEED TOO FAST	641	ROTATION NOISE	651	TAPE GETS SCRATCHED	661	FAULTY STOP/START OPERATION	671	FOCUS PROBLEM	681	
44	612	NO FORWARD OPERATION	622	IRREGULAR FORWARD	632	SPEED TOO SLOW	642	MOTOR NOISE	652	DISCS GETS SCRATCHED	662	FAULTY FORWARD OPERATION	672	ZOOM PROBLEM	682	
45	613	NO REVERSE OPERATION	623	IRREGULAR REVERSE	633	OTHER SPEED PROBLEM	643	WIND NOISE	653	TAPE GETS CHEWED/WRINKLED	663	FAULTY AUTOMATIC PROGRAM SEARCH	673	IRIS PROBLEM	683	
46	614	NO FAST FORWARD OR REWIND FUNCTION	624	IRREGULAR FAST FORWARD OR REWIND FUNCTION	634	OTHER SPEED PROBLEM	644	TAPE SQUEALING	654	TAPE JAMMED OR BROKEN	664	FAULTY CUE/REVIEW MODE	674	MACRO PROBLEM	684	
47	615	NO LOADING	625	IRREGULAR LOADING	635	OTHER SPEED PROBLEM	645	FAIR NOISE	655	TAPE GETS CURLLED	665	FAULTY SLOW MOTION OPERATION	675	OTHER LENS PROBLEM	685	
48	616	NO UNLOADING OR EJECTING OF TAPE	626	IRREGULAR UNLOADING OR EJECTING OF TAPE	636	OTHER SPEED PROBLEM	646	DISC SCRATCHES	656	TAPE GETS WRINKLED	666	FAULTY REVERSE MODE	676		686	
49	617	NO AUTO SHUT-OFF OPERATION	627	IRREGULAR AUTO SHUT-OFF OPERATION	637	NOISY TAPE LOADING	647	DISC SCRATCHES	657	TAPE STICKING	667	FAULTY REPEAT OPERATION	677		687	
50	618	TONER CARTRIDGE DOES NOT MOVE	628	IRREGULAR TONER CARTRIDGE	638	OTHER MECHANICAL NOISE PROBLEM	648	OTHER MECHANICAL NOISE	658	OTHER SOFTWARE DAMAGE PROBLEM	668	FAULTY RECORD REVIEW MODE	678		688	
51	619	TONER CARTRIDGE DOES NOT EJECT	629	IRREGULAR TONER CARTRIDGE	639	OTHER MECHANICAL NOISE PROBLEM	649	OTHER MECHANICAL NOISE	659	TAPE GETS WRINKLED	669	FAULTY RECORD REVIEW MODE	679		689	
52	620	MAGNETIC CARTRIDGE DOES NOT EJECT	630	IRREGULAR MAGNETIC CARTRIDGE	640	MECHANICAL NOISE	650		660	TAPE GETS WRINKLED	670	FAULTY RECORD REVIEW MODE	680		690	
53	621	MAGNETIC CARTRIDGE DOES NOT EJECT	631	IRREGULAR MAGNETIC CARTRIDGE	641	ROTATION NOISE	651	TAPE GETS SCRATCHED	661	TAPE GETS SCRATCHED	671	FAULTY STOP/START OPERATION	681		691	
54	622	MAGNETIC CARTRIDGE DOES NOT EJECT	632	IRREGULAR MAGNETIC CARTRIDGE	642	MOTOR NOISE	652	DISCS GETS SCRATCHED	662	DISCS GETS SCRATCHED	672	FAULTY FORWARD OPERATION	682		692	
55	623	MAGNETIC CARTRIDGE DOES NOT EJECT	633	IRREGULAR MAGNETIC CARTRIDGE	643	WIND NOISE	653	TAPE GETS CHEWED/WRINKLED	663	TAPE GETS CHEWED/WRINKLED	673	FAULTY AUTOMATIC PROGRAM SEARCH	683		693	
56	624	MAGNETIC CARTRIDGE DOES NOT EJECT	634	IRREGULAR MAGNETIC CARTRIDGE	644	TAPE SQUEALING	654	TAPE JAMMED OR BROKEN	664	TAPE JAMMED OR BROKEN	674	FAULTY CUE/REVIEW MODE	684		694	
57	625	MAGNETIC CARTRIDGE DOES NOT EJECT	635	IRREGULAR MAGNETIC CARTRIDGE	645	FAIR NOISE	655	TAPE GETS CURLLED	665	TAPE GETS WRINKLED	675	FAULTY SLOW MOTION OPERATION	685		695	
58	626	MAGNETIC CARTRIDGE DOES NOT EJECT	636	IRREGULAR MAGNETIC CARTRIDGE	646	DISC SCRATCHES	656	TAPE STICKING	666	TAPE STICKING	676	FAULTY REVERSE MODE	686		696	
59	627	MAGNETIC CARTRIDGE DOES NOT EJECT	637	IRREGULAR MAGNETIC CARTRIDGE	647	DISC SCRATCHES	657	OTHER SOFTWARE DAMAGE PROBLEM	667	OTHER SOFTWARE DAMAGE PROBLEM	677	FAULTY REPEAT OPERATION	687		697	
60	628	MAGNETIC CARTRIDGE DOES NOT EJECT	638	IRREGULAR MAGNETIC CARTRIDGE	648	DISC SCRATCHES	658	TAPE GETS WRINKLED	668	TAPE GETS WRINKLED	678	FAULTY RECORD REVIEW MODE	688		698	
61	629	MAGNETIC CARTRIDGE DOES NOT EJECT	639	IRREGULAR MAGNETIC CARTRIDGE	649	DISC SCRATCHES	659	TAPE GETS WRINKLED	669	TAPE GETS WRINKLED	679	FAULTY RECORD REVIEW MODE	689		699	
62	630	MAGNETIC CARTRIDGE DOES NOT EJECT	640	IRREGULAR MAGNETIC CARTRIDGE	650	MECHANICAL NOISE	660	TAPE GETS WRINKLED	670	TAPE GETS WRINKLED	680	FAULTY RECORD REVIEW MODE	690		700	
63	710	NO DATA PROCESSING	720	FAULTY DATA PROCESSING OPERATION	730	DATA DISPLAY PROBLEM	740		750		760	DATA READ/WHITE PROBLEM	770	SPECIAL DATA PROCESSING	780	
64	711	NO INITIAL SCREEN	721	INCORRECT DATA	731	INCORRECT CHARACTER DISPLAY	741		751		761	FORMATTING PROBLEM	771		781	
65	712	SYSTEM DOES NOT RESET	722	SYSTEM RESET WHILE BEING USED	732	MISSING DISPLAY CHARACTERS	742		752		762	DATA ON STORAGE MEDIUM BEING LOST	772		782	
66	713	SYSTEM DOES NOT BOOT UP	723	SYSTEM LOCKS OUT/CRASHES	733	FAULTY GRAPHIC DISPLAY	743		753		763	FRAME MEMORY PROBLEM	773		783	
67	714	NO OPERATION FROM PLUG-IN MODULE	724	FAULTY OPERATION OF PLUG-IN MODULE	734	FAULT										

SECTION CODES

ANT	ANTENNA SECTION	HDD	HARD DISC DRIVE	RFU	BOOSTER/RF UNIT
APA	AUDIO PROCESSING/ANALOG	HFS	HIGH FREQUENCY SECTION (RF)	RHD	ROTARY HEAD(S)
APP	AUDIO PROCESSING/DIGITAL	HOL	CASSETTE HOLDER	SFT	SOFTWARE (TAPE, DISC, ETC.)
APP	SIGNAL PROCESSING (ANALOG)	IDS	INFORMATION DISPLAY SECTION	SHD	STATIONARY HEAD(S)
ARM	ARM MECHANISM	IFC	IF-CIRCUIT	SLD	SLED MECHANISM
BCH	BATTERY CHARGE	IMG	IMAGE DISPLAY UNIT	SNS	SENSOR UNIT
BZL	BEZEL	INC	INTERNAL CONNECTOR	SPK	SPEAKER
CBT	CABINET	INP	SIGNAL INPUT SECTION	SRS	SUPPLY REEL SECTION
CHA	CHASSIS	KBD	KEYBOARD (SEPARATE)	STA	STATIC BLOCK
CLK	CLOCK/TIMER SECTION	LDG	LOADING MECHANISM	SVO	SERVO SECTION
CPA	COLOUR PROCESSING/ANALOG	LNM	LENS MECHANISM	SYS	SYSTEM CONTROL SECTION
CPD	COLOUR PROCESSING/DIGITAL	MEM	MEMORY CIRCUIT	TDM	TAPE DRIVE MECHANISM
CRT	PICTURE TUBE	MIC	MICROPHONE SECTION	THR	THREADING MECHANISM
CTR	CONTROL PANEL	OUT	SIGNAL OUTPUT SECTION	TIM	TIMER SECTION
DDM	DISC DRIVE MECHANISM	PFM	PAPER FEED MECHANISM	TNR	TENSION REGULATOR
DFL	DEFLECTION CIRCUIT	PIN	PINCH ROLLER/LEVER	TPT	TAPE PATH
DPR	SIGNAL PROCESSING (DIGITAL)	PRG	PROGRAMMING SECTION	TRS	TAKE-UP REEL SECTION
ERA	ERASE CIRCUIT	PRI	PRINT BLOCK	TUN	TUNING SECTION
EXC	EXTERNAL CONNECTOR	PRT	PROTECTION CIRCUIT	TXT	TEXT PROCESSING
FDD	FLOPPY DISC DRIVE	PSU	POWER SUPPLY	VPA	VIDEO PROCESSING/ANALOG
FLX	FLEXIBLE PCB	PUD	PICK-UP DEVICE	VPD	VIDEO PROCESSING/DIGITAL
FMW	FIRMWARE	PWA	POWER AMP SECTION	VWF	VIEWFINDER
FPK	FOCUS PACK	REM	REMOTE CONTROL SECTION	WIR	LEAD WIRE
HCM	HEAD CARRIAGE MECHANISM	RFM	RIBBON FEED MECHANISM	XXX	CABINET/COSMETIC PARTS

DEFECT CODES

MECHANICAL		ELECTRICAL	
A	WORN OUT	N	EXHAUSTED, LOW EMISSION
B	DIRTY, CLOGGED	O	BURNT, ARCING, MISSING PIXELS
C	MISALIGNED	P	MISALIGNED
D	CUT, BROKEN	Q	SHORT
E	DEFORMED	R	OPEN
F	SNAPPED	S	LEAKING
G	SCRATCHED	T	BAD CONTACT, CONNECTION
H	CRACKED, PEELED, CORRODED	U	OPEN PATTERN
I	LOOSE	V	CRACKED PCB
J	SHAKY, UNSTABLE	W	COLD OR NO SOLDERING
K	LEAKING	X	BRIDGED SOLDERING
L	DRY (NO LUBRICANT)	Y	WRONG COMPONENT
M	FOREIGN OBJECT	Z	MISSING COMPONENT
		1	SOFTWARE BUG

REPAIR CODES

A	REPLACEMENT	N	MAINTENANCE
B	MECHANICAL ALIGNMENT	O	REFURBISHING
C	ELECTRICAL ALIGNMENT	P	PREVENTIVE PARTS REPLACEMENT
D	RESOLDERING	Q	PREVENTIVE ACTION WITHOUT PARTS REPLACEMENT
E	CLEANING	U	EXPLANATION FOR CUSTOMER
F	LUBRICATION	V	ESTIMATION REFUSED
G	REPAIRED ELECTRICAL PARTS	W	ESTIMATION WITH PARTS
H	REPAIRED MECHANICAL PARTS	X	ESTIMATION WITHOUT PARTS
I	S/B MODIFICATION	Y	RETURN WITHOUT REPAIR
J	REMOVED COMPONENT (S)	Z	SET EXCHANGE
K	ADDED COMPONENTS		
L	FUNCTIONAL CHECK		
M	SPECIFICATION MEASUREMENT		

FLAG: INDICATES THE ONE MAJOR SYMPTOM/PART COMBINATION BY '1'

EXAMPLE OF USE :

FLAG	SYMPTOM CODE	PART NO	REF. NO	SECTION/PCB	DEFECT CODE	REPAIR CODE	QTY
1	1 4 1 2 3 6 4 1	1 1 1 1 1 1 1 1 1 1 3 4 5 6 7 8 9 X X	R 1 2 3 . 1 1 1 . .	Y A 2 2 . T D M . .	R C	A B	1 0
.							



SYSTÈME DE CODAGE POUR RÉPARATION IRIS

TABLES DES CODES SYMPTÔMES

IRIS

		1	PAS DE FONCTION	2	NIVEAU	3	QUALITÉ	4	BRUIT	5	INSTABILITÉ	6	PROBLÈMES PHYSIQUE OU D'ENREGISTREMENT	7	FONCTION SPÉCIALE	8	AUTRES CONDITIONS
1	GÉNÉRALITÉS	110	PROBLÈME D'ALIMENTATION	120	PROBLÈME DE CHARGEMENT	120	DÉFAUT D'AFFICHAGE	140	BRUITS PARTICULIERS	150	PROBLÈME DE TÉLÉCOMMANDE	160	DOMMAGE PHYSIQUE	170	DÉFAUT DE LA FONCTION GÉNÉRALE	180	DEMANDES SPÉCIALES
111			PAS D'ALIMENTATION SUR SECTEUR	121	PAS DE CHARGE DE LA BATTERIE	131	AFFICHAGE ERREUR DE MINUTERIE/COMPTEUR	141	BRUITS PARTICULIERS PAR DÉCHARGE DU TUBE CATHODIQUE	151	PAS DE FONCTIONNEMENT DE LA TÉLÉCOMMANDE	161	BOÎTIER ENDOMMAGÉ	171	TEST ET CONTRÔLE		
112			PAS D'ALIMENTATION AVEC ADAPTATEUR SECTEUR	122	CHARGEMENT INCOMPLET DE LA BATTERIE	132	LAMPE/LED DEFECTUEUX	142	BRUITS PARTICULIERS PAR DÉCHARGE DE LA TÉLÉCOMMANDE	152	BOUTON/ROTATION DE CONTRÔLE ENDOMMAGÉ	162	BOÎTIER ERREUR DE MINUTERIE	181	REMARQUE EN ETAT		
113			PAS D'ALIMENTATION AVEC PILES SÈCHES	123	AUTRE PROBLÈME DE CHARGE	133	VU-MÈTRE DEFECTUEUX	143	BRUITS PARTICULIERS A CAUSE DE L'ÉBÉNISTERIE	153	TRAPÉZE/COUVERCLE ENDOMMAGÉ	163	FONCTIONNEMENT ERREUR DE L'ARRÊT	182	CONVERSION DE FREQUENCE/SYSTÈME		
114			PAS D'ALIMENTATION AVEC BATTERIE RECHARGEABLE	124		134	AFFICHAGE ON-SCREEN DEFECTUEUX	144	PROGRAMMATION/PERSONNALISATION/NOUVEL APPRENTISSAGE DE LA TÉLÉCOMMANDE	154	PROGRAMMATION PAR MINUTERIE	172	REGLAGE INITIAL DEMANDE				
115			PAS D'ALIMENTATION AVEC BATTERIE SOLAIRE	125		135	AFFICHAGE ÉLECTRIQUE D'ACCORD DEFECTUEUX	145	FAIBLE SENSIBILITÉ DE LA TÉLÉCOMMANDE	155	PROGRAMMATION PAR MINUTERIE	173	PROGRAMMATION ERREUR DE LA MINUTERIE				
116			PAS D'ALIMENTATION AVEC BATTERIE VOTIVE COURTE DUREE DE FONCTIONNEMENT	126		136	AFFICHAGE MÉCANIQUE D'ACCORD DEFECTUEUX	146	BRUITS PARTICULIERS A CAUSE DE TRANSMISEURS	156	LENTILLE ENDOMMAGÉE	164	ERREUR DE MODÈLE DANS LE CIRCUIT				
117			BATTERIE DE MISE EN ROUTE À PARTIR DE LA POSITION VÉILLE	127		137	AFFICHAGE DU TIME CODE DEFECTUEUX	147	BRUITS PARTICULIERS A CAUSE DE COMPOSANTS	157	COUPOLE OU POINTE DE LECTURE	165	ERREUR DE MODÈLE DANS LE CIRCUIT				
118			SEULEMENT ALIMENTATION, PAS DE MARCHE/ARRÊT CYCLIQUE	128		138	AFFICHAGE D'ALARME/ERREUR DEFECTUEUX	148	GRINCÉMENT	158	ANTENNE ENDOMMAGÉE	166	ERREUR DE MODÈLE DANS LE CIRCUIT				
119			AUTRE PROBLÈME D'ALIMENTATION	129		139	MANQUE DE CONTRASTE DE L'AFFICHEUR	149	AUTRE BRUIT ANORMAL	159	TUBE CATHODIQUE OU VISEUR ENDOMMAGÉ	167	ERREUR DE MODÈLE DANS LE CIRCUIT				
120				130		140	MANQUE DE CONTRASTE DE L'AFFICHEUR	150		160	DISPARITION DE LA SIGNALÉTIQUE	177	ERREUR DE MODÈLE DANS LE CIRCUIT				
121				131		141	MANQUE DE CONTRASTE DE L'AFFICHEUR	151		161	AUTRE DOMMAGE PHYSIQUE	178	ERREUR DE MODÈLE DANS LE CIRCUIT				
122				132		142	MANQUE DE CONTRASTE DE L'AFFICHEUR	152		162		179	AUTRE FONCTION DEFECTUEUSE				
123				133		143	MANQUE DE CONTRASTE DE L'AFFICHEUR	153		163							
124				134		144	MANQUE DE CONTRASTE DE L'AFFICHEUR	154		164							
125				135		145	MANQUE DE CONTRASTE DE L'AFFICHEUR	155		165							
126				136		146	MANQUE DE CONTRASTE DE L'AFFICHEUR	156		166							
127				137		147	MANQUE DE CONTRASTE DE L'AFFICHEUR	157		167							
128				138		148	MANQUE DE CONTRASTE DE L'AFFICHEUR	158		168							
129				139		149	MANQUE DE CONTRASTE DE L'AFFICHEUR	159		169							
130				140		150	MANQUE DE CONTRASTE DE L'AFFICHEUR	160		170							
131				141		151	MANQUE DE CONTRASTE DE L'AFFICHEUR	161		171							
132				142		152	MANQUE DE CONTRASTE DE L'AFFICHEUR	162		172							
133				143		153	MANQUE DE CONTRASTE DE L'AFFICHEUR	163		173							
134				144		154	MANQUE DE CONTRASTE DE L'AFFICHEUR	164		174							
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199				209		219	MANQUE DE CONTRASTE DE L'AFFICHEUR	229		239							
200				210		220	MANQUE DE CONTRASTE DE L'AFFICHEUR	230		240							
201	</td																

CODES DE SECTION

ANT	ÉTAGE D'ANTENNE	HDD	ENTRAÎNEMENT DU DISQUE DUR	RFU	AMPLIFICATEUR/UNITÉ RF
APA	TRAITEMENT AUDIO ANALOGIQUE	HFS	ÉTAGE DE HAUTE FRÉQUENCE	RHD	TÊTE(S) ROTATIVE(S)
APD	TRAITEMENT AUDIO DIGITAL	HOL	SUPPORT DE CASSETTE	SFT	SOFTWARE (BANDE, DISQUE, ETC.)
APR	TRAITEMENT DES SIGNAUX (ANALOGIQUE)	IDS	CIRCUIT DE DISPLAY	SHD	TÊTE(S) FIXE(S)
ARM	MÉCANISME DU BRAS	IFC	CIRCUIT FI	SLD	MÉCANISME DE DÉPLACEMENT
BCH	CHARGEMENT DE BATTERIE	IMG	UNITE D'AFFICHAGE D'IMAGES	SNS	UNITÉ DE DÉTECTION
BZL	COUVERCLE	INC	CONNECTEUR INTERNE	SPK	HAUT-PARLEUR
CBT	BOÎTIER	INP	ÉTAGE D'ENTRÉE DES SIGNAUX	SRS	ÉTAGE DE LA BOBINE DÉBITSRICE
CHA	CHÂSSIS	KBD	CLAVIER	STA	BLOQUE STATIQUE
CLK	ÉTAGE DE MINUTERIE	LDG	MÉCANISME DE CHARGEMENT	SVO	ÉTAGE D'ASSERVISSEMENT
CPA	TRAITEMENT COULEUR ANALOGIQUE	LNM	MÉCANISME DE LENTILLE	SYS	ÉTAGE DU SYSTÈME DE CONTRÔLE
CPD	TRAITEMENT COULEUR DIGITAL	MEM	ÉTAGE DE MÉMOIRE	TDM	MÉCANISME D'ENTRAÎNEMENT DE LA BANDE
CRT	ÉCRAN CATHODIQUE	MIC	ÉTAGE DE MICROPHONE	THR	MÉCANISME DE MISE EN PLACE
CTR	PANNEAU DE CONTRÔLE	OUT	ÉTAGE DE SORTIE DES SIGNAUX	TIM	ÉTAGE D'HORLOGE
DDM	ÉTAGE D'ENTRAÎNEMENT DU DISQUE	PFM	MÉCANISME D'AVANCEMENT DU PAPIER	TNR	LEVIER DE RÉGLAGE DE LA TENSION DE BANDE
DFL	CIRCUIT DE DÉVIATION	PIN	GALET/LEVIER PRESSEUR	TPT	PARCOURS DE BANDE
DPR	TRAITEMENT DES SIGNAUX (NUMÉRIQUE)	PRG	ÉTAGE DE PROGRAMMATION	TRS	ÉTAGE DE LA BOBINE RÉCEPTRICE
ERA	CIRCUIT EFFACEMENT	PRI	BLOC D'IMPRIMANTE	TUN	ÉTAGE DE SYNTONISATION
EXC	CONNECTEUR EXTERNE	PRT	CIRCUIT DE PROTECTION	TXT	TRAITEMENT DE TEXTE
FDD	ENTRAÎNEMENT DU DISQUE FLEXIBLE	PSU	ALIMENTATION	VPA	TRAITEMENT VIDÉO ANALOGIQUE
FLX	PLAQUETTE FLEXIBLE	PUD	PHONOLECTEUR	VPD	TRAITEMENT VIDÉO DIGITAL
FMW	PROGRAMMATION FIXE	PWA	AMPLIFICATEUR DE PIUSSANCE	VWF	VISEUR
FPK	CIRCUIT DE MISE AU POINT	REM	TÉLÉCOMMANDE	WIR	CÂBLE
HCM	MÉCANISME DE SUPPORT DE TÊTE	RFM	MÉCANISME D'AVANCEMENT DU RUBAN	XXX	PIÈCES ESTHÉTIQUES

CODES DE DÉFAUTS

MÉCANIQUE		ÉLECTRIQUE	
A	USÉ	N	ÉPUISÉ, ÉMISSION FAIBLE
B	SALE, MACULÉ	O	BRÛLÉ, ARC, PIXELS MANQUANTS
C	DÉRÉGLAGE	P	DÉRÉGLAGE
D	COUPURE, DÉFFECTUEUX	Q	COURT-CIRCUIT
E	DÉFORMATION	R	OUVERTURE
F	ENCLENCHEMENT, CALAGE	S	FUITE
G	ÉGRATIGNURES	T	MAUVAIS CONTACT, SOUDURE
H	FISSURE, PELLURE, CORROSION	U	CIRCUIT OUVERT
I	DÉTACHEMENT	V	PLAQUETTE FISSURÉE
J	INSTABLE	W	SOUDURE SÈCHE OU MANQUANTE
K	FUITE	X	SOUDURE EN PONT
L	SEC (PAS DE LUBRIFIANT)	Y	PIÈCE ERROÑÉE
M	OBJET, CORPS ÉTRANGER	Z	PIÈCE MANQUANTE
		1	ERREUR DE LOGICIEL

CODES DE RÉPARATION

A	REPLACEMENT	N	ENTRETIEN
B	RÉGLAGE MÉCANIQUE	O	REMISE EN ÉTAT
C	RÉGLAGE ÉLECTRIQUE	P	REPLACEMENT PRÉVENTIF DE PIÈCES
D	RESSOUDURE PRÉVENTIVE	Q	ACTION PRÉVENTIVE SANS REMPLACEMENT DE PIÈCES
E	NETTOYAGE	U	EXPLICATIONS COMPLÉMENTAIRES
F	LUBRIFICATION	V	DEVIS REFUSÉ
G	RÉPARATION PIÈCES ÉLECTRIQUES	W	DEVIS INCLUANT LES PIÈCES
H	RÉPARATION PIÈCES MÉCANIQUES	X	DEVIS EXCLUANTS LES PIÈCES
I	MODIFICATION SELON BULLETIN TECHNIQUE	Y	RETOUR AU CLIENT SANS RÉPARATION
J	PIÈCES ENLEVÉES	Z	ÉCHANGE D'APPAREIL
K	PIÈCES AJOUTÉES		
L	CONTRÔLE FONCTIONNEL		
M	MESURE DES SPÉCIFICATIONS		

EXEMPLE :

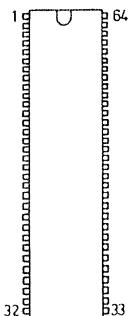
CODE SYMPTÔME	RÉFÉRENCE SCHEMA
1 4 1 2 3 6 4 1	R 1 2 3 . . . 1 1 1 . . .

CODE SECTION	CODE PLAQUETTE	CODE DÉFAUT	CODE RÉPARATION
T D M . . P S U . .	V F 4 4 P 1 0 0 4 .	R . . C . .	A . . B . .

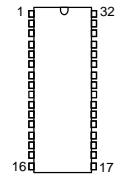
LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS- ABKÜRZUNGEN
LISTA DELLE ABBREVIAZIONI - LISTA DE ABREVIACIONES

- **+USYS:** System voltage
- **+U_VIDEO:** Video drive voltage for the CRT board
- **+ STDBY_ ON:** Standby data (0V standby , 0.6v switched ON)
- **+5V DST:** 5v unregulated voltage from the DST
to supply the tuner and audio MSP device
- **+5V ON:** 5v regulated voltage from the DST
to supply the tuner and audio MSP device
- **+5V UP :** Microprocessor supply voltage
- **BCL:** Beam current limiting information
- **CVBS:** Composite video / luminance signal
- **CVBS_OUT:** Composite video output
- **CVBS_TXT:** Composite video for teletext extraction
- **DEGAUSS:** Degauss signal
- **EW :** East / West
- **FORMAT / BC:** Full white control DATA depending on
16/9 selected format
- **HDRV:** Horizontal deflection signal
- **HTR1 / HTR2:** Heater voltage from the DST to CRT PCB
- **LFB:** Line Fast Blanking
- **MUTE :** Mutes audio amplifiers
- **PO:** “Power ON “ IP95 : reset activated and output = 8v
“PO” = 5v when TV is working in normally
- **POWER_FAIL:** Detection of mains supply and deflection stage failures
- **RESET:** Microprocessor reset signal
- **SAFETY:** Safety information from the deflection stage
- **SCL:** Serial Clock
- **SDA :** Serial Data
- **SIF:** Sound IF
- **TRAP_INFO:** 31.4Mhz IF trap activation
- **U_STANDBY:** Standby voltage
- **U_DRIVER:** Horizontal sync signal from TDA8855H
- **U_TIMER:** 11v voltage used during “Switch ON “ phase
and “Wake Up“ mode
- **V_FLB:** Vertical flyback reference for the microprocessor
- **V_GUARD:** Safety data generated by the vertical amplifier
TDA 8351
- **V_RETTRACE:** 42 / 48volts (depending on tube type) generated by
the DST and used for vertical blanking
- **V_SUPPLY:** 13.5 to 15.5 volts (depending on tube type) generated
by the DST

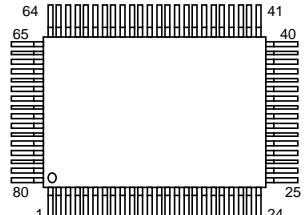
INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE -
CIRCUITS INGRES ET TRANSISTORS
INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN -
CIRCUITI INTEGRATI TRANSISTOR
CIRCUITOS INTEGRADOS Y TRANSISTORES



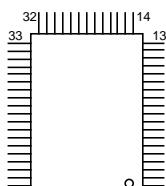
MPS3400C-PP-C6



MX27C200MC-12



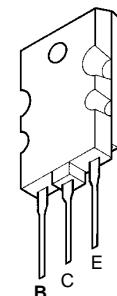
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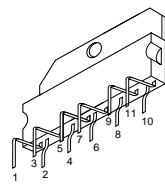
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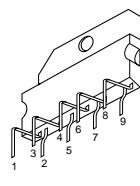
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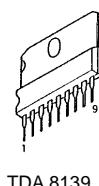
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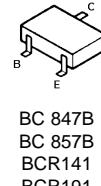
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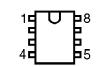
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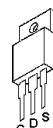
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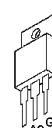
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BC 857B
BCR141
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DTC113ZK
DTC144EK
TN1401



ST24C08-M
TS3702CD



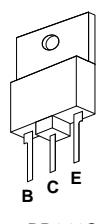
STP6 NA60F1



BT806 -600C



MC7812/CT



BD241C



BC 337
BC 546B
BC 547B



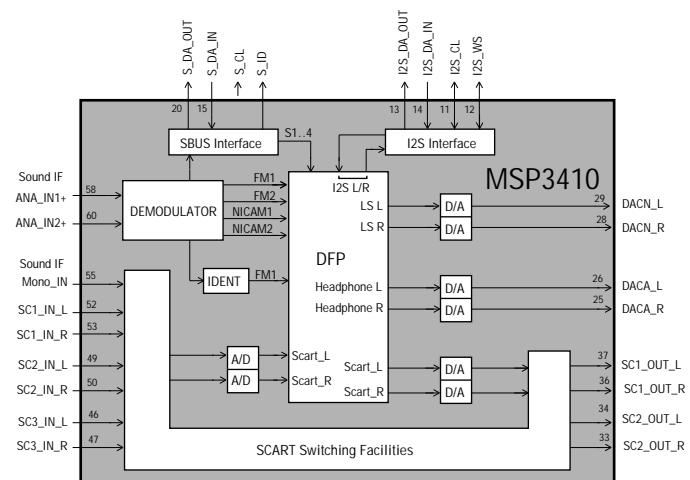
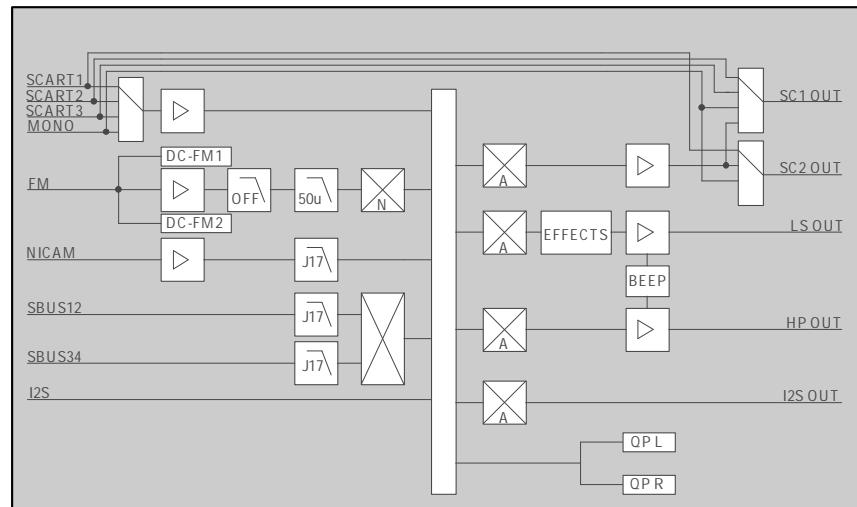
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BF423
2SA1020Y
2SC2236Y



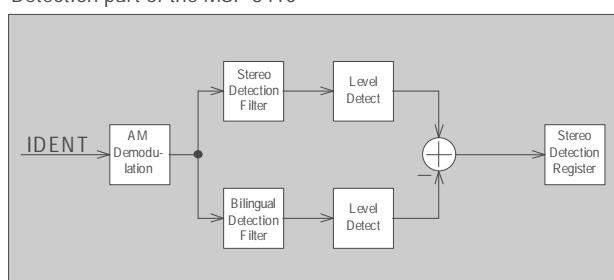
MPS750

**INTEGRATED CIRCUITS BLOCK DIAGRAMS -
SYNOPTIQUES INTERNES DES CIRCUITS INTEGRES -
INTEGRIERTE SCHALTUNGEN BLOCKSCHALTBIHLER
SCHEMA A BLOCCHI DEI CIRCUITI INTEGRATI -
VISTA INTERNA DE LOS CIRCUITOS INTEGRADOS**

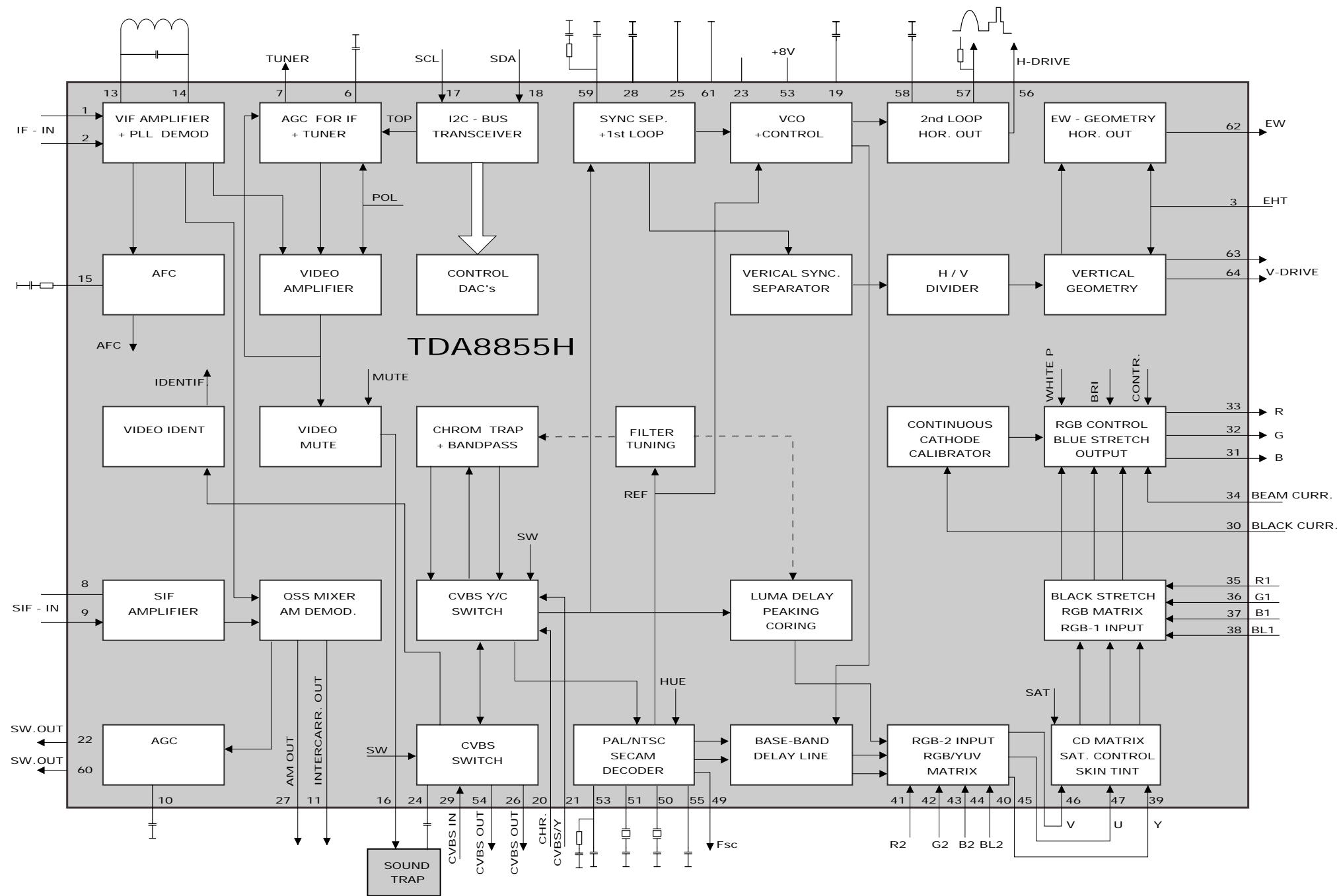
Audio baseband processing of the MSP3410



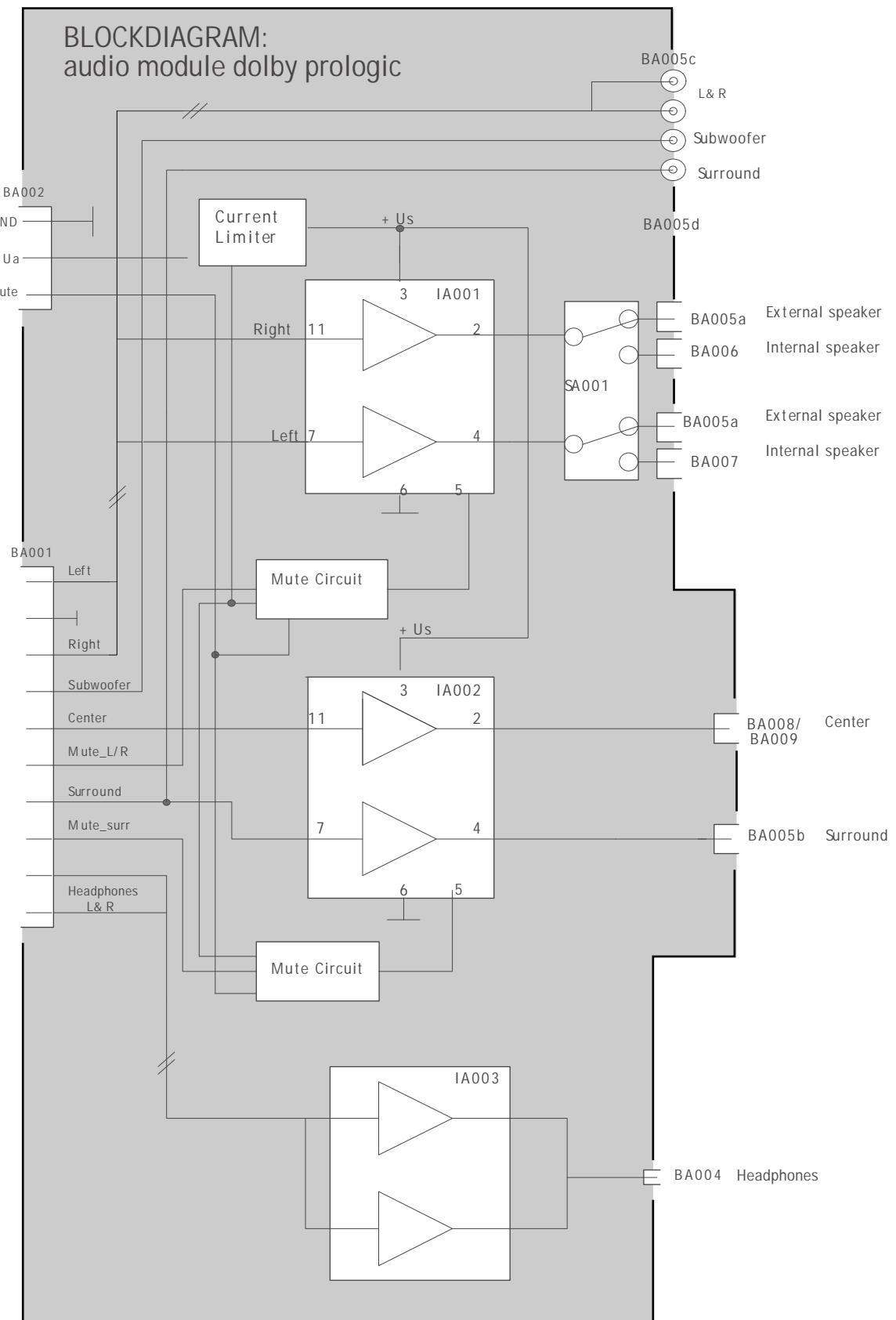
Detection part of the MSP 3410



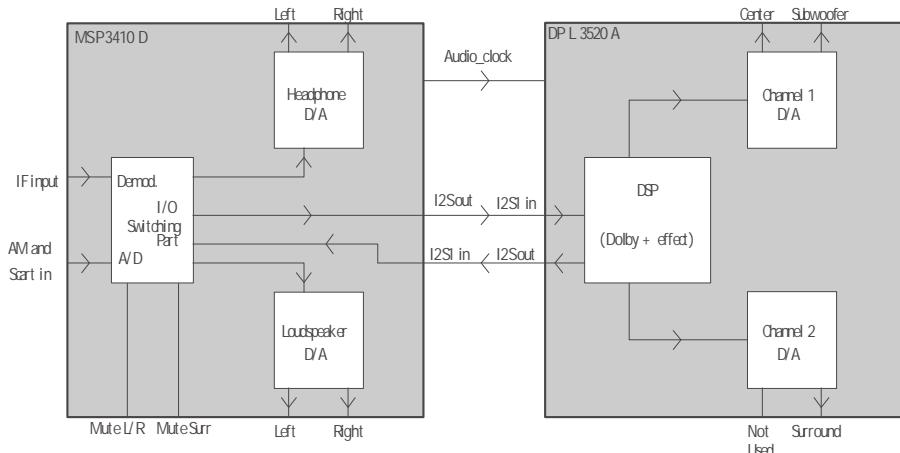
IV01 TDA 8855H



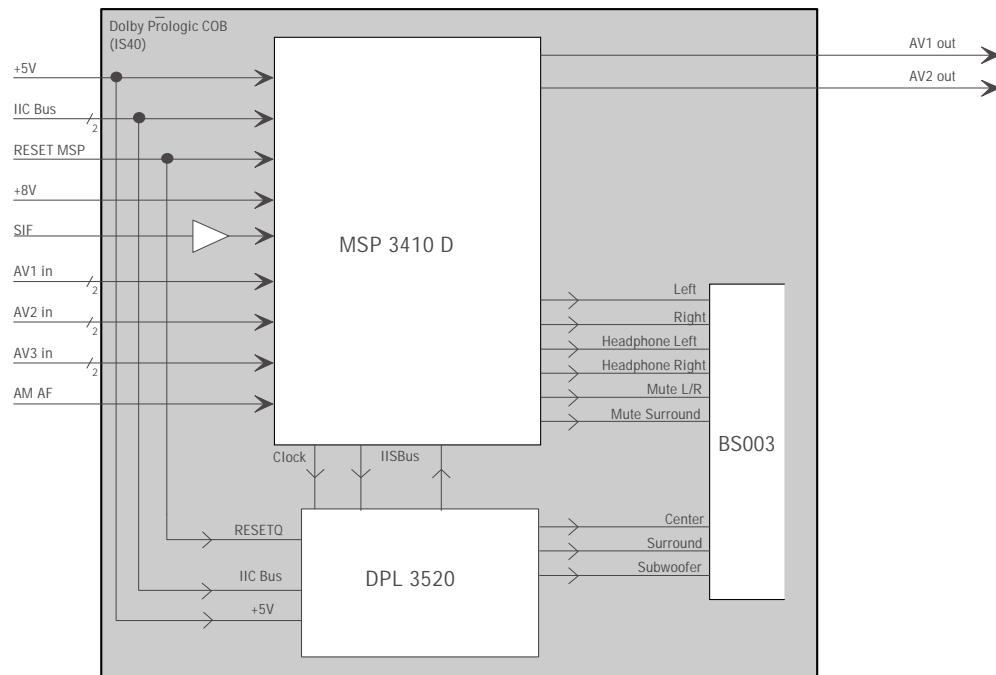
BLOCK DIAGRAM (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA SYNOPTIQUE (AUDIO MODULE DOLBY PROLOGIC)
BLOCKSCHALTBILD (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA A BLOCCI (AUDIO MODULE DOLBY PROLOGIC)
ESQUEMA DE BLOQUES (AUDIO MODULE DOLBY PROLOGIC)



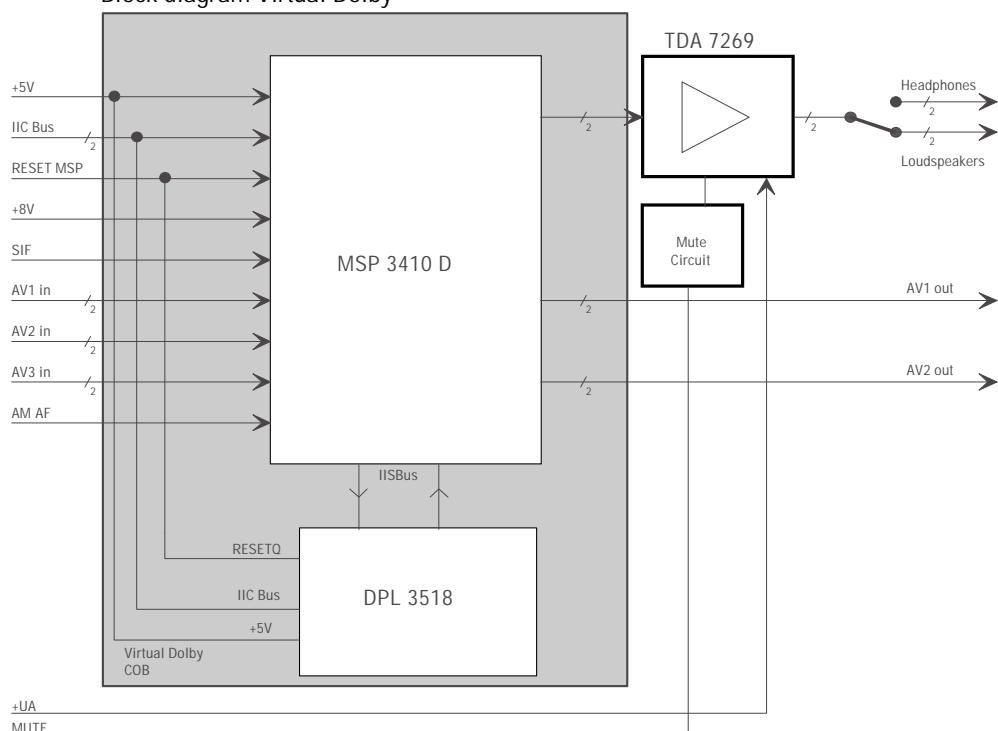
Interface requirement audio part with Dolby Prologic

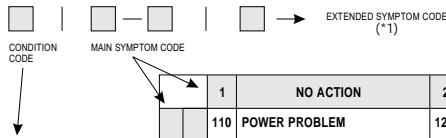


Block diagram Dolby Prologic



Block diagram Virtual Dolby





IRIS REPAIR CODING SYSTEM

SYMPTOM CODE TABLE



1	CONSTANTLY		111	NO POWER ON AC	121	NO BATTERY CHARGING INCOMPLETE BATTERY CHARGE OTHER CHARGING PROBLEM	131	FAULTY TIMER/COUNTER DISPLAY	141	ERT DISCHARGING NOISE	151	NO REMOTE CONTROL OPERATION	161	DAMAGED CABINET	171	FAULTY CLOCK FUNCTION	181	TEST AND CHECK
2	INTERMITTENTLY		112	NO POWER WHEN USING AC-ADAPTER	122	FAULTY LAMPELD OPERATION	132	FAULTY LEVEL METER OPERATION	142	EHT DISCHARGING NOISE	152	INCORRECT REMOTE CONTROL OPERATION	162	DAMAGED HANDLE	172	FAULTY SLEEP FUNCTION	182	GENERAL OVERHAUL
3	AFTER A WHILE		113	NO POWER WHEN USING BATTERY	123	FAULTY LEVEL METER OPERATION	133	FAULTY LEVEL METER OPERATION	143	NOisy CABINET	153	INCORRECT REMOTE CONTROL PROGRAMMING/	163	DAMAGED CONTROL KNOB(S)/BUTTON(S)	173	FAULTY TIMER PROGRAMMING	183	SYSTEM/RECOVERY CONVERSION
4	IN A HOT ENVIRONMENT		114	NO POWER WHEN USING RECHARGEABLE BATTERIES	124	FAULTY LEVEL METER OPERATION	134	FAULTY LEVEL METER OPERATION	144	TRANSFORMER	154	INCORRECT REMOTE CONTROL	164	DAMAGED COVER	174	FAULTY BACKUP	184	BACKUP NOT TESTED
5	IN A COLD ENVIRONMENT		115	NO POWER FROM SOLAR CELL	125	ELECTRONIC TUNING DISPLAY FAULT	135	MECHANICAL TUNING DISPLAY FAULT	145	NOisy COMPONENT(S)	155	SENSITIVITY	165	DAMAGED SEAL	175	SOFTWARE PROGRAMMING PROBLEM	185	MODIFICATION/CIRCUIT CHANGE
6	WHEN SWITCHING		116	NO POWER WHEN USING A CAR BATTERY	126	MECHANICAL TUNING DISPLAY FAULT	136	MECHANICAL TUNING DISPLAY FAULT	146	RATTLE	156	OTHER REMOTE CONTROL PROBLEM	166	DAMAGED PLUG OR SOCKET	176	FAULTY RECORD MUTE OPERATION	186	WRONG SET IN CARTON
7	UNDER VIBRATION		117	SHORT OPERATION TIME/SHORT BATTERY LIFE	127	FAULTY TIME CODE DISPLAY	137	FAULTY TIME CODE DISPLAY	147	OTHER ABNORMAL NOISE	157	FAULTY RECORD MUTE/ERROR DISPLAY	167	DAMAGED LENS	177	FAULTY PROGRAMMED PLAYBACK	187	OTHER SPECIAL REQUIREMENTS
8	IN A DAMP/WEET ENVIRONMENT		118	POWER-OFF FUNCTION NOT WORKING	128	DISPLAY DIM	138	DISPLAY DIM	148	OTHER ABNORMAL NOISE	158	DISPLAY DIM	168	DAMAGED ANTENNA	178	FAULTY MEMORY FUNCTION	188	SYMPOT NOT AVAILABLE
9	IN A DRY ENVIRONMENT		119	NO SWITCH-IN/OUT STANDBY	129	OTHER DISPLAY PROBLEM	139	DISPLAY DIM	149	OTHER ABNORMAL NOISE	159	DISPLAY DIM	169	DAMAGED CRT OR VIEWFINDER	179	OTHER GENERAL FUNCTION PROBLEM	189	
A	AFTER BEING DROPPED		120	NO RECEPTION	220	POOR RECEPTION	230	TRANSMISSION PROBLEM	240	NOISY RECEPTION/TRANSMISSION	250	UNSTABLE RECEPTION/TRANSMISSION	260	TUNING PROBLEM	270	SPECIAL COMMUNICATION PROBLEM	280	SPECIAL RECEPTION PROBLEM
B	AFTER LIGHTNING STRIKE		211	NO AM RECEPTION	221	POOR AM RECEPTION	231	NO TRANSMISSION	241	LINE NOISE	251	TUNING DRIFT	261	MANUAL TUNING PROBLEM	271	FAULTY STEER RECEPTION	281	FAULTY MAIN CHANNEL (A) FUNCTION
C	STATION(S)/SOFTWARE/MODE		212	NO FM RECEPTION	222	POOR FM RECEPTION	232	POOR SW RECEPTION	242	OSCILLATION	252	FAULTY TUNING	262	AUTOMATIC TUNING PROBLEM	272	FAULTY CHANNEL SELECTION	282	FAULTY SUB-CHANNEL (B) FUNCTION
D	ONLY ON CERTAIN STANDARDS		213	NO VH RECEPTION	223	POOR VH RECEPTION	233	NO UHF RECEPTION	243	INTERSTATION INTERFERENCE	253	INCORRECT TUNING	263	INCORRECT TUNING	273	FAULTY MESSAGE READ-OUT FUNCTION	283	FAULTY SSB RECEPTION
E	ONLY ON ONE CHANNEL		214	NO UHF RECEPTION	224	POOR UHF RECEPTION	234	NO UHF RECEPTION	244	OTHER NOISE RECEPTION/TRANSMISSION	254	FAULTY RECORD PROBLEM	264	INCORRECT TUNING	274	FAULTY AUTO/MEMORY	284	FAULTY RS/VP5 OPERATION
F	ONLY WITH CERTAIN INPUT(S)		215	NO BAND RECEPTION	225	POOR BAND RECEPTION	235	POOR BAND RECEPTION	245	OTHER NOISE RECEPTION/TRANSMISSION	255	FAULTY RECORD PROCESSING	265	FAULTY RECORD TONE	275	FAULTY SELECTED RECEPTION	285	FAULTY WAKE-UP TONE
G	ONLY ON CERTAIN OUTPUT(S)		216	NO HDTV RECEPTION	226	POOR HDTV RECEPTION	236	POOR HDTV RECEPTION	246	OTHER NOISE RECEPTION/TRANSMISSION	256	FAULTY RECORD TONE	266	FAULTY RECORD TONE	276	FAULTY RECORD TONE	286	FAULTY RECORD TONE
H	IN STANDBY/OFF MODE		217	NO OPS RECEPTION	227	POOR OPS RECEPTION	237	OTHER 'NO RECEPTION' PROBLEM	247	OTHER 'NO RECEPTION' PROBLEM	257	FAULTY RECORD TONE	267	FAULTY RECORD TONE	277	FAULTY RECORD TONE	287	FAULTY RECORD TONE
J	AT EDIT POINT		218	OTHER 'NO RECEPTION' PROBLEM	228	OTHER 'NO RECEPTION' PROBLEM	238	OTHER 'NO RECEPTION' PROBLEM	248	OTHER 'NO RECEPTION' PROBLEM	258	FAULTY RECORD TONE	268	FAULTY RECORD TONE	278	FAULTY RECORD TONE	288	FAULTY RECORD TONE
K	WHEN INTERCONNECTED		219	OTHER 'NO RECEPTION' PROBLEM	229	OTHER 'NO RECEPTION' PROBLEM	239	OTHER 'NO RECEPTION' PROBLEM	249	OTHER 'NO RECEPTION' PROBLEM	259	FAULTY RECORD TONE	269	FAULTY RECORD TONE	279	FAULTY RECORD TONE	289	FAULTY RECORD TONE
L	LIQUID CONTAMINATION		220	NO PICTURE	320	PICTURE LEVEL PROBLEM	330	PICTURE QUALITY PROBLEM	340	PICTURE NOISE	350	UNSTABLE PICTURE	360	POOR PICTURE RECORDING	370	SPECIAL PICTURE FUNCTION PROBLEM	380	PICTURE DISPLAY/PICKUP PROBLEM
X	NO SYMPTOM OR PROBLEM FOUND		311	NO PICTURE IN E TO E MODE	321	PICTURE TOO DARK	331	POOR PICTURE RESOLUTION	341	SNOWY PICTURE	351	SYNC PROBLEM	361	NO PICTURE RECORDING	371	EDITING PROBLEM	381	BURN MARK ON DISPLAY/PICKUP
			312	NO PICTURE IN PLAYBACK MODE	322	PICTURE TOO BRIGHT	332	CONTRAST TOO LOW	342	DOT NOISE OR DROPOUT ON PICTURE	362	PICTURE PUMPING	372	FAULTY FADED/WIPE OPERATION	382	SCRATCH ON DISPLAY/PICKUP		
			313	NO PICTURE IN VIEWFINDER	323	CONTRAST TOO HIGH	333	RINGING ON PICTURE	343	NOISE BARS ON PICTURE	363	PICTURE SHAKING	373	FAULTY NEGATIVE/POSITIVE SWITCHING	383	DISTORTION ON DISPLAY/PICKUP		
			314	NO RASTER, BLACK PICTURE	324	SATURATED WHITE OR BLACK LEVEL	334	PICTURE SMEAR/LAG	344	PICTURE SHAKING (HORIZONTAL OR VERTICAL)	364	UNWANTED ERASURE OF PICTURE	374	FAULTY SUPERIMPOSE/ELOP OPERATION	384	MISSING ON DISPLAY/PICKUP		
			315	ONLY HORIZONTAL LINE	325	SHADING ON PICTURE	335	POOR LINEARITY OR GEOMETRY	345	BEATING O PICTURE	365	FLICKERING PICTURE	375	FAULTY PICTURE IN PICTURE/DIGITAL PICTURE OPERATION	385	BRIGHT POINT(S) IN PHOSPHOR/PIXEL PROBLEM		
			316	ONLY VERTICAL LINE	326	INCORRECT CENTRING OF PICTURE	336	PICTURE SIZE INCORRECT	346	HOSTING ON PICTURE	366	FLASHING PICTURE	376	PICTURE OPERATE	386	PICTURE DISPLAY/PICKUP PROBLEM		
			317	OTHER PICTURE LEVEL PROBLEM	327	INCORRECT CENTRING OF PICTURE	337	INCORRECT CENTRING OF PICTURE	347	VCR HEAD SWITCHING NOISE ON PICTURE	367	FLASHING PICTURE	377	FAULTY DIGITAL SHUTTER FUNCTION	387	FAULTY GENLOCK FUNCTION		
			318	OTHER 'NO PICTURE' PROBLEM	328	OTHER PICTURE LEVEL PROBLEM	338	V-SIZE INCORRECT	348	OTHER PICTURE NOISE PROBLEM	368	FLASHING PICTURE	378	FAULTY DIGITAL PICTURE FUNCTION	388	FAULTY AUTO-EDIT FUNCTION		
			319	OTHER 'NO PICTURE' PROBLEM	329	OTHER PICTURE LEVEL PROBLEM	339	H-SIZE INCORRECT	349	OTHER PICTURE NOISE PROBLEM	369	FLASHING PICTURE	379	OTHER SPECIAL PICTURE FUNCTION PROBLEM	389			
4	C O U L O U R		410	NO COLOUR	420	COLOUR LEVEL PROBLEM	430	POOR COLOUR QUALITY	440	NOISY COLOUR	450	UNSTABLE COLOUR	460	POOR COLOUR RECORDING	470	SPECIAL COLOUR FUNCTION PROBLEM	480	STEREO/MULTI MODE OPERATION PROBLEM
			411	NO COLOUR IN E TO E MODE	421	WEAK COLOUR	431	SOME OR ALL COLOURS MISSING	441	COLOUR NOISE ON A BLACK & WHITE PICTURE	451	COLOUR FLASHING	461	NO COLOUR RECORDING	471	FAULTY AUTOMATIC WHITE BALANCE	481	NO STEREO OPERATION
			412	NO COLOUR IN PLAYBACK MODE	422	EXCESSIVE COLOUR	432	EXCESSIVE COLOUR	442	COLOUR STREAKING	452	COLOUR CHANGING	462	NO COLOUR RECORDING	472	FAULTY COLOUR EFFECTS FUNCTION	482	POOR CHANNEL SEPARATION
			413	NO COLOUR IN PART OF PICTURE	423	OTHER COLOUR LEVEL PROBLEM	433	HUE PROBLEM	443	OTHER COLOUR NOISE PROBLEM	453	FLICKERING COLOUR	463	NO COLOUR RECORDING	473	OTHER SPECIAL COLOUR FUNCTION PROBLEM	483	DIFFERENCE IN PHASE BETWEEN CHANNELS
			414	OTHER 'NO COLOUR' PROBLEM	424	OTHER COLOUR LEVEL PROBLEM	434	PURITY ERROR	444	COLOUR NOT LOCKED	454	OTHER UNSTABLE COLOUR PROBLEM	464	NO COLOUR RECORDING	474	FAULTY RECORDING OPERATION	484	PROBLEM WITH SURROUND SOUND MODE
			415	OTHER 'NO COLOUR' PROBLEM	425	OTHER COLOUR LEVEL PROBLEM	435	LANDING ERROR	445	OTHER UNSTABLE COLOUR PROBLEM	455	NO COLOUR RECORDING	465	NO COLOUR RECORDING	475	FAULTY DDB/DOL OPERATION	485	PCM AUDIO MODE PROBLEM
			416	OTHER 'NO COLOUR' PROBLEM	426	CONVERGENCE ERROR	436	SCRATCHING NOISE	446	MULTIPATH NOISE	456	NO COLOUR RECORDING	466	NO COLOUR RECORDING	476	FAULTY NOISE REDUCTION OPERATION	486	OTHER STEREO/MULTI MODE PROBLEM
			417	OTHER 'NO COLOUR' PROBLEM	427	SHADING ERROR	437	IGNITION NOISE	447	OTHER AUDIO NOISE PROBLEM	457	NO COLOUR RECORDING	467	NO COLOUR RECORDING	477	FAULTY SPECIAL AUDIO FUNCTION PROBLEM	487	
5	A U D I O		510	NO AUDIO	520	AUDIO LEVEL PROBLEM	530	AUDIO QUALITY	540	NOISY AUDIO	550	UNSTABLE AUDIO	560	POOR AUDIO RECORDING	570	POOR SPECIAL AUDIO FUNCTION PROBLEM	580	STEREO/MULTI MODE OPERATION PROBLEM
			511	NO SOUND IN E TO E MODE	521	LOW AUDIO LEVEL	531	POOR FREQUENCY RESPONSE	541	HUM	551	JUMPING OR REPEATING AUDIO	561	AUDIO NOT BEING RECORDED	571	FAULTY TAPE OPERATION	581	NO STEREO OPERATION
			512	NO PLAYBACK OF OUTGOING MESSAGE(S)	522	EXCESSIVE AUDIO LEVEL	532	DISTORTED AUDIO	542	HISS	552	AUDIO PUMPING OR BREATHING	562	NO ERASURE PROTECTION FOR AUDIO	572	FAULTY ECHO OPERATION	582	POOR CHANNEL SEPARATION
			513	NO PLAYBACK OF INCOMING MESSAGE(S)	523	BALANCE PROBLEM	533	NO OR POOR TREBLE	543	CROSSTALK	553	AUDIO DROPOUTS	563	PREVIOUS AUDIO RECORDING NOT BEING ERASED	573	FAULTY MIXING OPERATION	583	DIFFERENCE IN PHASE BETWEEN CHANNELS
			514	OTHER 'NO AUDIO' PROBLEM	524	FADER PROBLEM	534	NO OR POOR BASS	544	STATIC, POP OR CLICK NOISE	554	CYCLIC AUDIO MUTING	564	FAULTY REPEAT MODE OPERATION	574	FAULTY RECORD MODE OPERATION	584	FAULTY RECORDING OPERATION
			515	OTHER 'NO AUDIO' PROBLEM	525	AUDIO LEVEL REMAINING	535	OTHER AUDIO LEVEL PROBLEM	545	SCRATCHING NOISE	555	HOW AND FLUTTER	565	FAULTY SYNC RECORDING OPERATION	575	FAULTY DDB/DOL OPERATION	585	PCM AUDIO MODE PROBLEM
			516	OTHER 'NO AUDIO' PROBLEM	526	IRREGULAR LOADING	536	IGNITION NOISE	546	MULTIPATH NOISE	556	HIGH-LEVEL ACOUSTIC FEEDBACK	566	FAULTY NOISE REDUCTION OPERATION	576	FAULTY NOISE REDUCTION OPERATION	586	OTHER STEREO/MULTI MODE PROBLEM
			517	OTHER 'NO AUDIO' PROBLEM	527	IRREGULAR FORWARD MODE	537	OTHER AUDIO NOISE PROBLEM	547	NOISY TAPE LOADING	557	OTHER UNSTABLE AUDIO PROBLEM	567	NO COLOUR RECORDING	577	FAULTY TAPE OPERATION	587	
			518	OTHER 'NO AUDIO' PROBLEM	528	IRREGULAR REVERSE MODE	538	ROTATION NOISE	548	OTHER MECHANICAL NOISE PROBLEM	558	NO COLOUR RECORDING	568	NO COLOUR RECORDING	578	FAULTY TAPE OPERATION	588	
			519	OTHER 'NO AUDIO' PROBLEM	529	IRREGULAR TONEARM MOVEMENT	539	MOTOR NOISE	549	TAPE GETS SCRATCHED	559	TAPE GETS CHEATED/WRINKLED	569	NO COLOUR RECORDING	579	FAULTY TAPE OPERATION	589	
			520	IRREGULAR TONEARM MOVEMENT	530	IRREGULAR EJECTING OF TAPE	540	WIND NOISE	550	TAPE GETS JAMMED OR BROKEN	560	TAPE GETS CURLIED	570	NO COLOUR RECORDING	580	FAULTY TAPE OPERATION	590	
			521	IRREGULAR EJECTING OF TAPE	531	IRREGULAR TONEARM OPERATION	541	TAPE SOLEARING	551	SLACK TAPE	561	TAPE STICKING	571	NO COLOUR RECORDING	581	FAULTY TAPE OPERATION	591	
			522	IRREGULAR TONEARM OPERATION	532	IRREGULAR REVERSE OPERATION	542	FAN NOISE	552	TAPE GETS WRINKLED	562	NO COLOUR RECORDING	572	FAULTY TAPE OPERATION	582	FAULTY TAPE OPERATION	592	
			523	IRREGULAR REVERSE OPERATION	533	IRREGULAR FORWARD OPERATION	543	DISC SCRAPPING	553	TAPE STICKING	563	NO COLOUR RECORDING	573	FAULTY TAPE OPERATION	583	FAULTY TAPE OPERATION	593	
			524	IRREGULAR FORWARD OPERATION	534	IRREGULAR TONEARM MOVEMENT	544	NOISY TAPE LOADING	554	SLACK TAPE	564	NO COLOUR RECORDING	574	FAULTY TAPE OPERATION	584	FAULTY TAPE OPERATION	594	
			525	IRREGULAR TONEARM MOVEMENT	535	IRREGULAR EJECTION OF DISC	545	OTHER MECHANICAL NOISE PROBLEM	555	TAPE STICKING	565	NO COLOUR RECORDING	575	FAULTY TAPE OPERATION	585	FAULTY TAPE OPERATION	595	
			526	IRREGULAR EJECTION OF DISC	536	IRREGULAR TAPE LOADING	546	OTHER MECHANICAL NOISE PROBLEM	556	TAPE STICKING	566	NO COLOUR RECORDING	576	FAULTY TAPE OPERATION	586	FAULTY TAPE OPERATION	596	
			527	IRREGULAR TAPE LOADING	537	IRREGULAR TAPE LOADING	547	OTHER MECHANICAL NOISE PROBLEM	557	TAPE STICKING	567	NO COLOUR RECORDING	577	FAULTY TAPE OPERATION	587	FAULTY TAPE OPERATION	597	
			528	IRREGULAR TAPE LOADING	538	IRREGULAR TAPE LOADING	548	OTHER MECHANICAL NOISE PROBLEM	558	TAPE STICKING	568	NO COLOUR RECORDING	578	FAULTY TAPE OPERATION	588	FAULTY TAPE OPERATION	598	
			529	IRREGULAR TAPE LOADING	539	IRREGULAR TAPE LOADING	549	OTHER MECHANICAL NOISE PROBLEM	559	TAPE STICKING	569	NO COLOUR RECORDING	579	FAULTY TAPE OPERATION	589	FAULTY TAPE OPERATION	599	
			530	IRREGULAR TAPE LOADING	540	IRREGULAR TAPE LOADING	550	IRREGULAR TAPE LOADING	560	NO COLOUR RECORDING	570	FAULTY TAPE OPERATION	580	FAULTY TAPE OPERATION	590	FAULTY TAPE OPERATION	600	
			531	IRREGULAR TAPE LOADING	541	IRREGULAR TAPE LOADING	551	IRREGULAR TAPE LOADING	561	NO COLOUR RECORDING	571	FAULTY TAPE OPERATION	581	FAULTY TAPE OPERATION	591	FAULTY TAPE OPERATION	601	
			532	IRREGULAR TAPE LOADING	542	IRREGULAR TAPE LOADING	552	IRREGULAR TAPE LOADING	562	NO COLOUR RECORDING	572	FAULTY TAPE OPERATION	582	FAULTY TAPE OPERATION	592	FAULTY TAPE OPERATION	602	
			533	IRREGULAR TAPE LOADING	543	IRREGULAR TAPE LOADING	553	IRREGULAR TAPE LOADING	563	NO COLOUR RECORDING	573	FAULTY TAPE OPERATION	583	FAULTY TAPE OPERATION	593	FAULTY TAPE OPERATION	603	
			534	IRREGULAR TAPE LOADING	544	IRREGULAR TAPE LOADING	554	IRREGULAR TAPE LOADING	564	NO COLOUR RECORDING	574	FAULTY TAPE OPERATION	584	FAULTY TAPE OPERATION	594	FAULTY TAPE OPERATION	604	
			535	IRREGULAR TAPE LOADING	545	IRREGULAR TAPE LOADING	555	IRREGULAR TAPE LOADING	565	NO COLOUR RECORDING	575	FAULTY TAPE OPERATION	585	FAULTY TAPE OPERATION	595	FAULTY TAPE OPERATION	605	
			536	IRREGULAR TAPE LOADING	546	IRREGULAR TAPE LOADING	556	IRREGULAR TAPE LOADING	566	NO COLOUR RECORDING	576	FAULTY TAPE OPERATION	586	FAULTY TAPE OPERATION	596	FAULTY TAPE OPERATION	606	
			537	IRREGULAR TAPE LOADING	547	IRREGULAR TAPE LOADING	557	IRREGULAR TAPE LOADING	567	NO COLOUR RECORDING	577	FAULTY TAPE OPERATION	587	FAULTY TAPE OPERATION	597	FAULTY TAPE OPERATION	607	
			538	IRREGULAR TAPE LOADING	548	IRREGULAR TAPE LOADING	558	IRREGULAR TAPE LOADING	568	NO COLOUR RECORDING	578	FAULTY TAPE OPERATION	588	FAULTY TAPE OPERATION	598	FAULTY TAPE OPERATION	608	
			539	IRREGULAR TAPE LOADING	549	IRREGULAR TAPE LOADING	559	IRREGULAR TAPE LOADING	569	NO COLOUR RECORDING	579	FAULTY TAPE OPERATION	589	FAULTY TAPE OPERATION	599	FAULTY TAPE OPERATION	609	
			540	IRREGULAR TAPE LOADING	550	IRREGULAR TAPE LOADING	560	IRREGULAR TAPE LOADING	570	NO COLOUR RECORDING	580	FAULTY TAPE OPERATION	590	FAULTY TAPE OPERATION	600	FAULTY TAPE OPERATION	610	
			541	IRREGULAR TAPE LOADING	551	IRREGULAR TAPE LOADING	561	IRREGULAR TAPE LOADING	571	NO COLOUR RECORDING	581	FAULTY TAPE OPERATION	591	FAULTY TAPE OPERATION	601	FAULTY TAPE OPERATION	611	
			542	IRREGULAR TAPE LOADING	552	IRREGULAR TAPE LOADING	562	IRREGULAR TAPE LOADING	572	NO COLOUR RECORDING	582	FAULTY TAPE OPERATION	592	FAULTY TAPE OPERATION	602	FAULTY TAPE OPERATION	612	
			543	IRREGULAR TAPE LOADING	553	IRREGULAR TAPE LOADING	563	IRREGULAR TAPE LOADING	573	NO COLOUR RECORDING	583	FAULTY TAPE OPERATION	593	FAULTY TAPE OPERATION	603	FAULTY TAPE OPERATION	613	
			544	IRREGULAR TAPE LOADING	554	IRREGULAR TAPE LOADING	564	IRREGULAR TAPE LOADING	574	NO COLOUR RECORDING	584	FAULTY TAPE OPERATION	594	FAULTY TAPE OPERATION				

SECTION CODES

ANT	ANTENNA SECTION	HDD	HARD DISC DRIVE	RFU	BOOSTER/RF UNIT
APA	AUDIO PROCESSING/ANALOG	HFS	HIGH FREQUENCY SECTION (RF)	RHD	ROTARY HEAD(S)
APP	AUDIO PROCESSING/DIGITAL	HOL	CASSETTE HOLDER	SFT	SOFTWARE (TAPE, DISC, ETC.)
APP	SIGNAL PROCESSING (ANALOG)	IDS	INFORMATION DISPLAY SECTION	SHD	STATIONARY HEAD(S)
ARM	ARM MECHANISM	IFC	IF-CIRCUIT	SLD	SLED MECHANISM
BCH	BATTERY CHARGE	IMG	IMAGE DISPLAY UNIT	SNS	SENSOR UNIT
BZL	BEZEL	INC	INTERNAL CONNECTOR	SPK	SPEAKER
CBT	CABINET	INP	SIGNAL INPUT SECTION	SRS	SUPPLY REEL SECTION
CHA	CHASSIS	KBD	KEYBOARD (SEPARATE)	STA	STATIC BLOCK
CLK	CLOCK/TIMER SECTION	LDG	LOADING MECHANISM	SVO	SERVO SECTION
CPA	COLOUR PROCESSING/ANALOG	LNM	LENS MECHANISM	SYS	SYSTEM CONTROL SECTION
CPD	COLOUR PROCESSING/DIGITAL	MEM	MEMORY CIRCUIT	TDM	TAPE DRIVE MECHANISM
CRT	PICTURE TUBE	MIC	MICROPHONE SECTION	THR	THREADING MECHANISM
CTR	CONTROL PANEL	OUT	SIGNAL OUTPUT SECTION	TIM	TIMER SECTION
DDM	DISC DRIVE MECHANISM	PFM	PAPER FEED MECHANISM	TNR	TENSION REGULATOR
DFL	DEFLECTION CIRCUIT	PIN	PINCH ROLLER/LEVER	TPT	TAPE PATH
DPR	SIGNAL PROCESSING (DIGITAL)	PRG	PROGRAMMING SECTION	TRS	TAKE-UP REEL SECTION
ERA	ERASE CIRCUIT	PRI	PRINT BLOCK	TUN	TUNING SECTION
EXC	EXTERNAL CONNECTOR	PRT	PROTECTION CIRCUIT	TXT	TEXT PROCESSING
FDD	FLOPPY DISC DRIVE	PSU	POWER SUPPLY	VPA	VIDEO PROCESSING/ANALOG
FLX	FLEXIBLE PCB	PUD	PICK-UP DEVICE	VPD	VIDEO PROCESSING/DIGITAL
FMW	FIRMWARE	PWA	POWER AMP SECTION	VWF	VIEWFINDER
FPK	FOCUS PACK	REM	REMOTE CONTROL SECTION	WIR	LEAD WIRE
HCM	HEAD CARRIAGE MECHANISM	RFM	RIBBON FEED MECHANISM	XXX	CABINET/COSMETIC PARTS

DEFECT CODES

MECHANICAL		ELECTRICAL	
A	WORN OUT	N	EXHAUSTED, LOW EMISSION
B	DIRTY, CLOGGED	O	BURNT, ARCING, MISSING PIXELS
C	MISALIGNED	P	MISALIGNED
D	CUT, BROKEN	Q	SHORT
E	DEFORMED	R	OPEN
F	SNAPPED	S	LEAKING
G	SCRATCHED	T	BAD CONTACT, CONNECTION
H	CRACKED, PEELED, CORRODED	U	OPEN PATTERN
I	LOOSE	V	CRACKED PCB
J	SHAKY, UNSTABLE	W	COLD OR NO SOLDERING
K	LEAKING	X	BRIDGED SOLDERING
L	DRY (NO LUBRICANT)	Y	WRONG COMPONENT
M	FOREIGN OBJECT	Z	MISSING COMPONENT
		1	SOFTWARE BUG

REPAIR CODES

A	REPLACEMENT	N	MAINTENANCE
B	MECHANICAL ALIGNMENT	O	REFURBISHING
C	ELECTRICAL ALIGNMENT	P	PREVENTIVE PARTS REPLACEMENT
D	RESOLDERING	Q	PREVENTIVE ACTION WITHOUT PARTS REPLACEMENT
E	CLEANING	U	EXPLANATION FOR CUSTOMER
F	LUBRICATION	V	ESTIMATION REFUSED
G	REPAIRED ELECTRICAL PARTS	W	ESTIMATION WITH PARTS
H	REPAIRED MECHANICAL PARTS	X	ESTIMATION WITHOUT PARTS
I	S/B MODIFICATION	Y	RETURN WITHOUT REPAIR
J	REMOVED COMPONENT (S)	Z	SET EXCHANGE
K	ADDED COMPONENTS		
L	FUNCTIONAL CHECK		
M	SPECIFICATION MEASUREMENT		

FLAG: INDICATES THE ONE MAJOR SYMPTOM/PART COMBINATION BY '1'

EXAMPLE OF USE :

FLAG	SYMPTOM CODE	PART NO	REF. NO	SECTION/PCB	DEFECT CODE	REPAIR CODE	QTY
1	1 4 1 2 3 6 4 1	1 1 1 1 1 1 1 1 1 1 3 4 5 6 7 8 9 X X	R 1 2 3 . 1 1 1 . .	Y A 2 2 . T D M . .	R C	A B	1 0
.							

CÓDIGOS DE SECCIÓN

ANT	SECCIÓN DE LA ANTENA	HDD	EXCITADOR DEL DISCO DURO	RFU	AMPLIFICADOR/UNIDAD RF
APA	PROCESADO DE AUDIO ANALÓGICO	HFS	SECCIÓN DE ALTA FRECUENCIA	RHD	CABEZAS ROTATIVAS
APD	PROCESADO DE AUDIO DIGITAL	HOL	SOPORTE DE CASSETTE	SFT	SOFTWARE (CINTA, DISCO, ETC)
APR	PROCESADO DE SEÑALES (ANALÓGICO)	IDS	SECCIÓN DEL DISPLAY DE INFORMACIÓN	SHD	CABEZAS FIJAS
ARM	MECANISMO DEL BRAZO	IFC	CIRCUITO FI	SLD	MECANISMO DE SEGUIMIENTO
BCH	CARGA DE BATERÍA	IMG	UNIDAD DE VISUALIZACIÓN DE IMÁGENES	SNS	UNIDAD DE DETECCIÓN
BZL	CARÁTULA	INC	CONECTOR INERNO	SPK	ALTAVOZ
CBT	MUEBLE	INP	SECCIÓN DE ENTRADA DE SEÑALES	SRS	SECCIÓN DEL CARRETE DE SUMINISTRO
CHA	CHASIS	KBD	TECLADO	STA	BLOQUE ESTÁTICO
CLK	SECCIÓN DE RELOJ	LDG	MECANISMO DE CARGA	SVO	SECCIÓN DE SERVO
CPA	PROCESADO DE COLOR ANALÓGICO	LNM	MECANISMO DE LENTE	SYS	SECCIÓN DEL SISTEMA DE CONTROL
CPD	PROCESADO DE COLOR DIGITAL	MEM	SECCIÓN DE MEMORIA	TDM	MECANISMO DE ACCIONAMIENTO DE LA CINTA
CRT	TUBO DE IMAGEN	MIC	SECCIÓN DE MICRÓFONO	THR	MECANISMO DE ENHEBRADO
CTR	PANEL DE CONTROL	OUT	SECCIÓN DE SALIDA DE SEÑALES	TIM	SECCIÓN DE TEMPORIZACIÓN
DDM	SECCIÓN DE ACCIONAMIENTO DEL DISCO	PFM	MECANISMO DE ALIMENTACIÓN DEL PAPEL	TNR	REGULADOR DE LA TENSIÓN DE LA CINTA
DFL	CIRCUITO DE DEFLEXIÓN	PIN	RODILLO/PALANCA DE APRIETE	TPT	CAMINO DE LA CINTA
DPR	PROCESADO DE SEÑALES (DIGITAL)	PRG	SECCIÓN DE PROGRAMACIÓN	TRS	SECCIÓN DEL CARRETE DE RECOGIDA
ERA	CIRCUITO DE BORRADO	PRI	BLOQUE DE IMPRESOR	TUN	SECCIÓN DE SINTONIZACIÓN
EXC	CONECTOR EXTERNO	PRT	CIRCUITO DE PROTECCIÓN	TXT	PROCESADO DE TEXTOS
FDD	EXCITADOR DEL FLOPPY DISC	PSU	ALIMENTACIÓN	VPA	PROCESADO DE VIDEO ANALÓGICO
FLX	PLACA FLEXIBLE	PUD	DISPOSITIVO CAPTADOR	VPD	PROCESADO DE VIDEO DIGITAL
FMW	PROGRAMACIÓN FIJA	PWA	SECCIÓN DEL AMP DE POTENCIA	VWF	VISOR
FPK	CONJUNTO DE ENFOQUE	REM	SECCIÓN DEL CONTROL REMOTO	WIR	CABLE
HCM	MECANISMO DE SOPORTE DE LA CABEZA	RFM	MECANISMO DE ALIMENTACIÓN DE LA CINTA	XXX	PIEZAS ESTÉTICAS

CÓDIGOS DE LOS DEFECTOS

MÉCANICO		ELÉCTRICO	
A	GASTADO	N	AGOTADO, EMISIÓN DÉBIL
B	SUCIO, MANCHADO	O	QUEMADO, FORMACIÓN DE ARCO PIXELS QUE FALTAN
C	MAL AJUSTADO	P	MAL AJUSTADO
D	CORTADO, DEFECTUOSO	Q	CORTOCIRCUITO
E	DEFORMADO	R	ABIERTO
F	ENGANCHADO, BLOQUEADO	S	PÉRDIDA
G	RASGUÑO	T	MAL CONTACTO, SOLDADURA
H	HENDEDURA, PELADO, CORROSIÓN	U	CIRCUITO ABIERTO
I	SEPARACIÓN	V	PLACA HENDIDA
J	INESTABILIDAD	W	SOLDADURA SECA O QUE FALTA
K	PÉRDIDA	X	SOLDADURA EN PUENTE
L	SECO (SIN LUBRIFICANTE)	Y	COMPONENTE EQUIVOCADO
M	CUERPO EXTRAÑO	Z	COMPONENTE QUE FALTA
		1	ERROR DEL SOFTWARE

CÓDIGOS DE REPARACIÓN

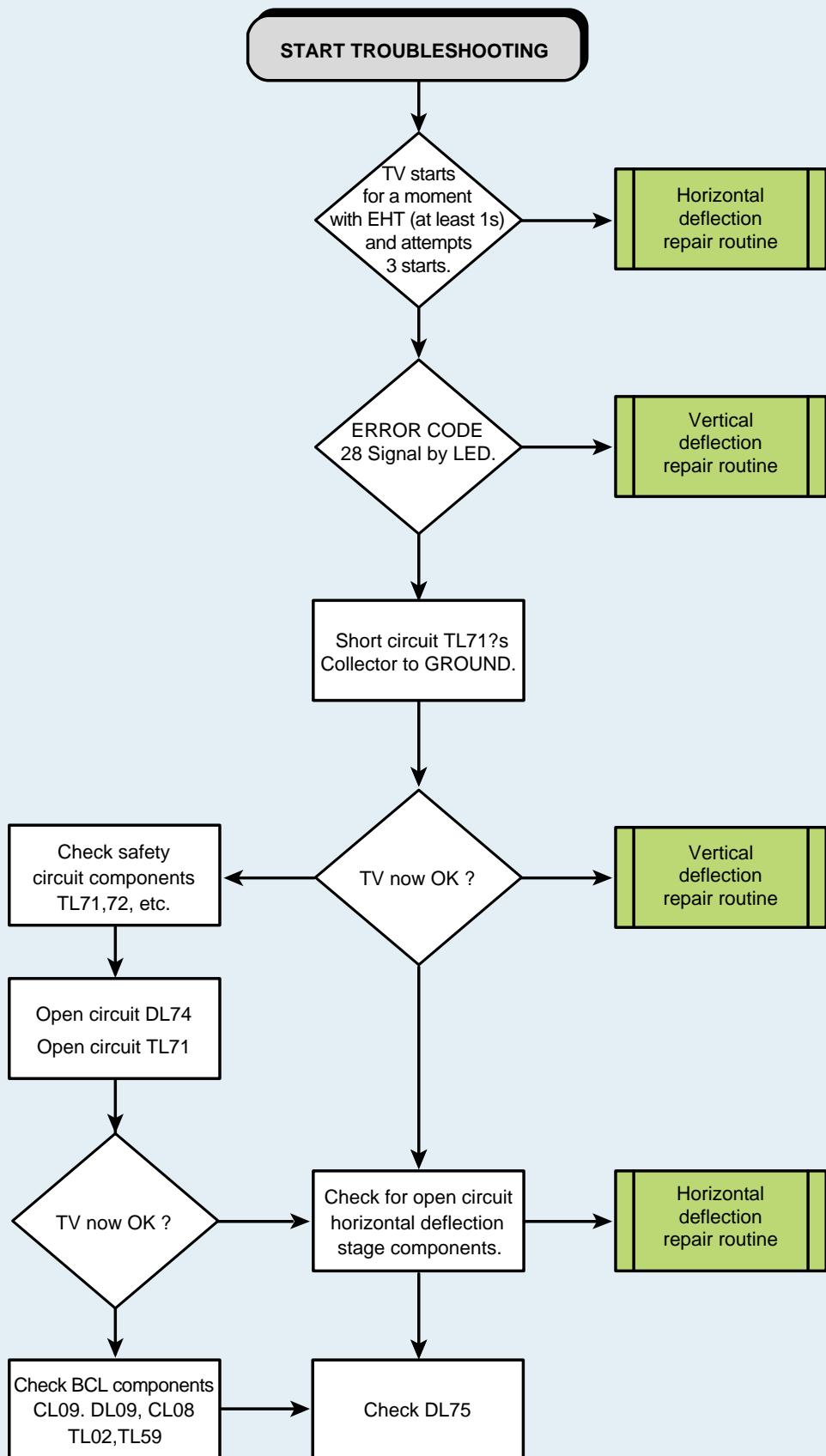
A	SUSTITUCIÓN	N	MANTENIMIENTO
B	AJUSTE MECÁNICO	O	REPULIR
C	AJUSTE ELÉCTRICO	P	SUSTITUCIÓN PREVENTIVA DE COMPONENTES
D	RESOLDADURA	Q	ACCIÓN PREVENTIVA SIN SUSTITUCIÓN DE COMPONENTES
E	LIMPIEZA	U	EXPLICACIÓN AÑADIDA
F	ENGRASE	V	PRESUPUESTO RECHAZADO
G	COMPONENTES ELÉCTRICOS REPARADOS	W	PRESUPUESTO CON COMPONENTES
H	COMPONENTES MECÁNICOS REPARADOS	X	PRESUPUESTO SIN COMPONENTES
I	MODIFICACIÓN SEGÚN BOLETÍN DE SERVICIO		
J	COMPONENTES QUITADOS	Y	DEVUELTO AL CLIENTE SIN REPARACIÓN
K	COMPONENTES AÑADIDOS	Z	CAMBIO DEL APARATO
L	COMPROBACIÓN FUNCIONAL		
M	MEDICIÓN DE ESPECIFICACIÓN		

BANDEROLA : INDICA LA ÚNICA Y PRINCIPAL COMBINACIÓN SÍNTOMA/COMPONENTE POR '1'

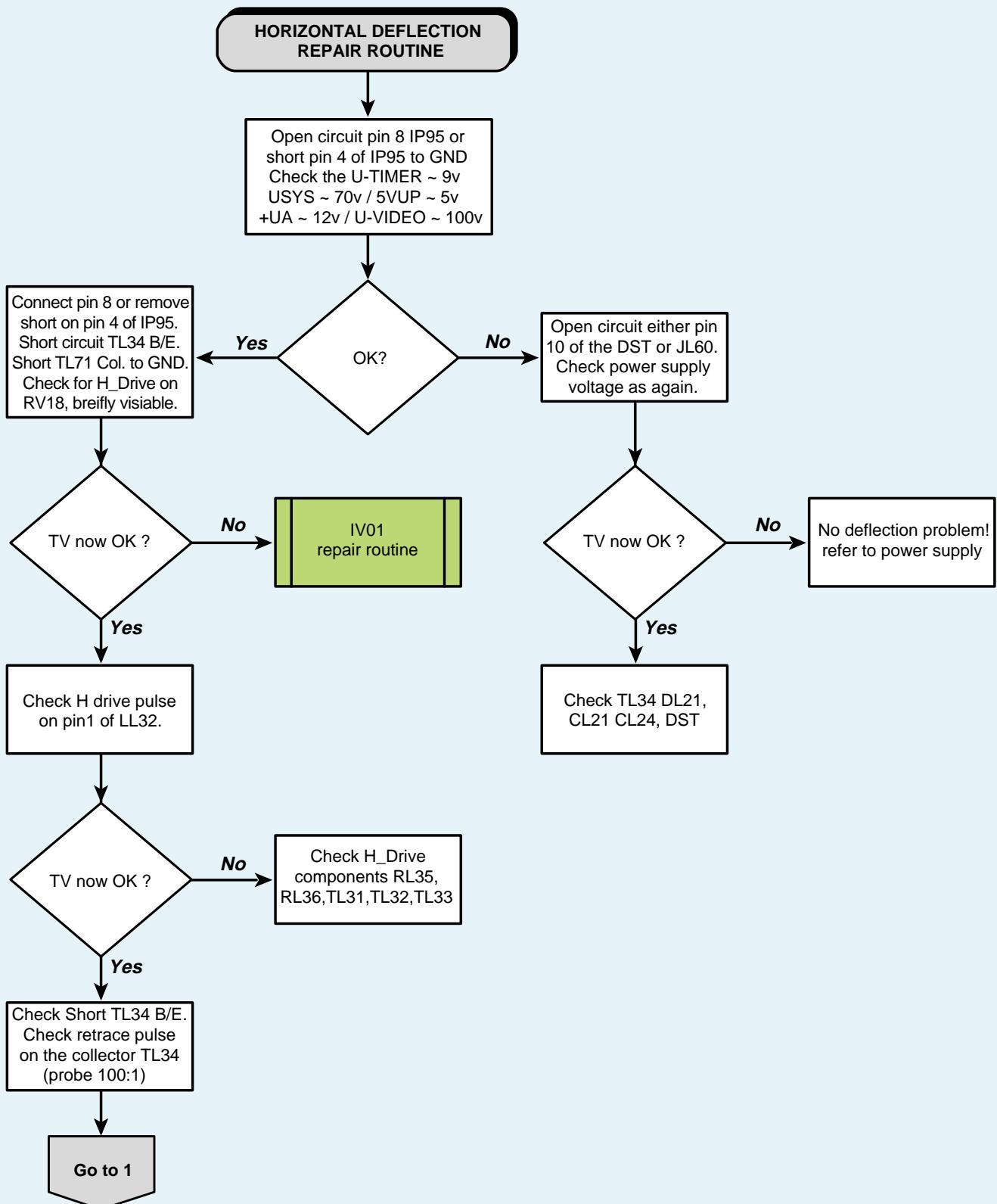
EJEMPLO:

BANDEROLA	CÓDIGO DE SÍNTOMA	CÓDIGO DE REPUESTO	NÚMERO DE REFERENCIA	COMPONENTE/PLACA	CÓDIGO DE DEFECTO	CÓDIGO DE REPARACIÓN	CANTIDAD
1 .	1 4 1 2 3 6 4 1	1 1 1 1 1 1 1 1 1 3 4 5 6 7 8 9 X X	R 1 2 3 . 1 1 1 .	Y A 2 2 . T D M .	R C A B	1 0	

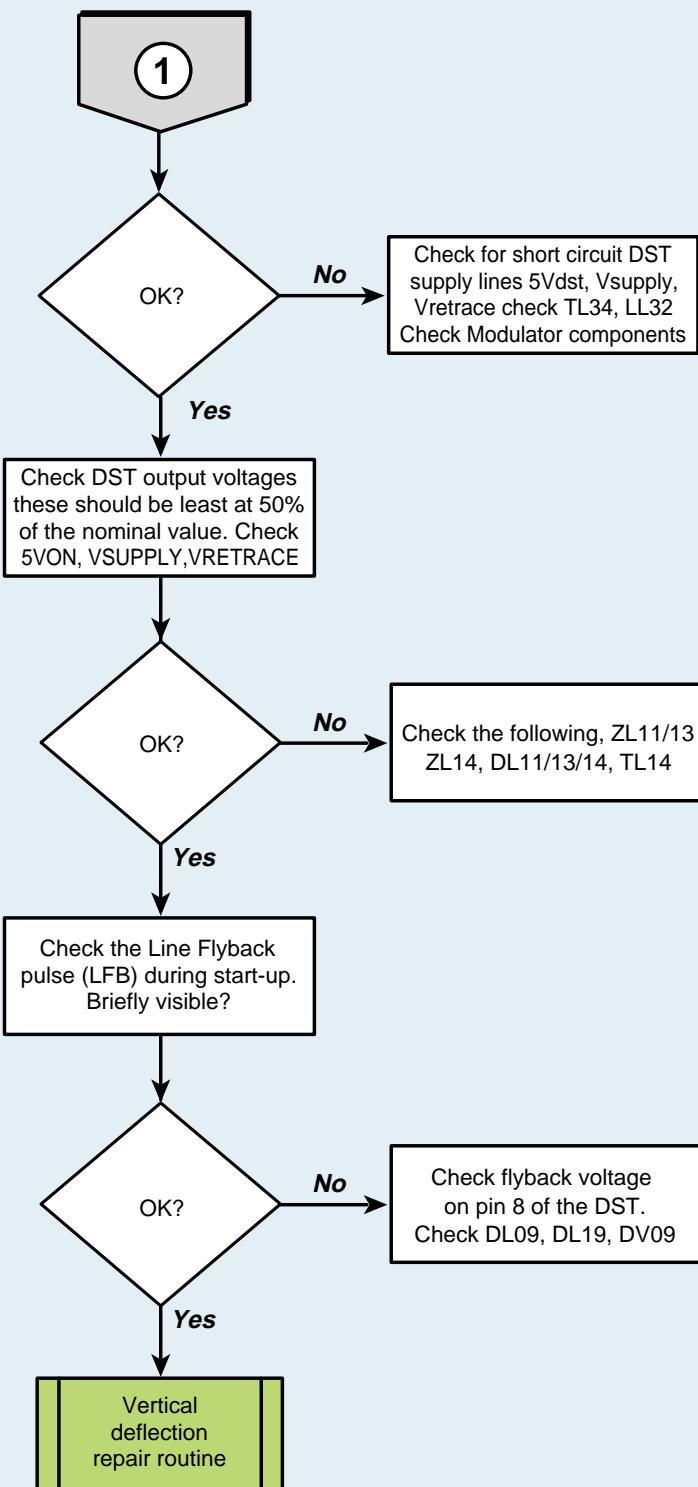
DEFLECTION CIRCUIT CHECK



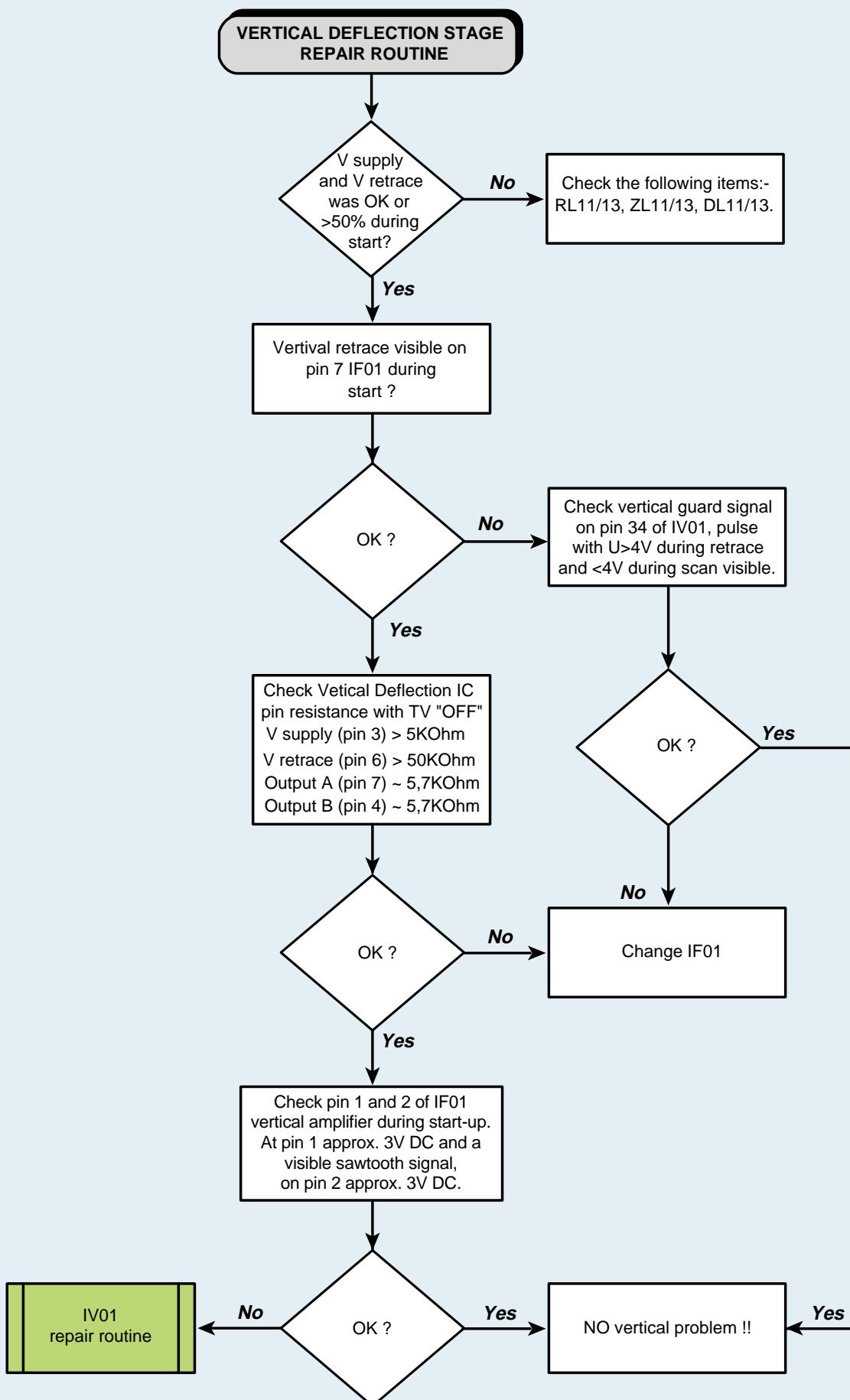
DEFLECTION CIRCUIT CHECK



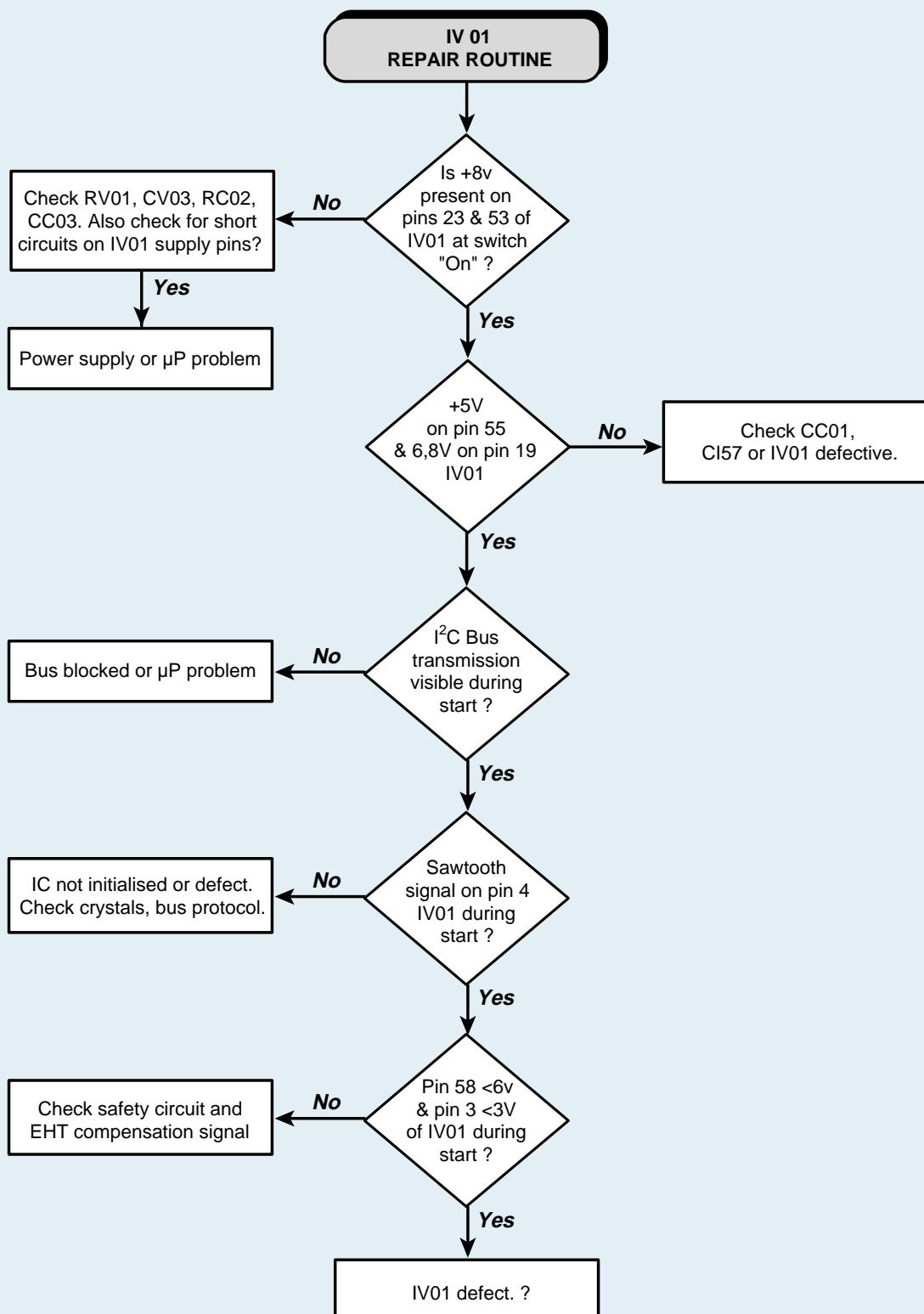
DEFLECTION CIRCUIT CHECK



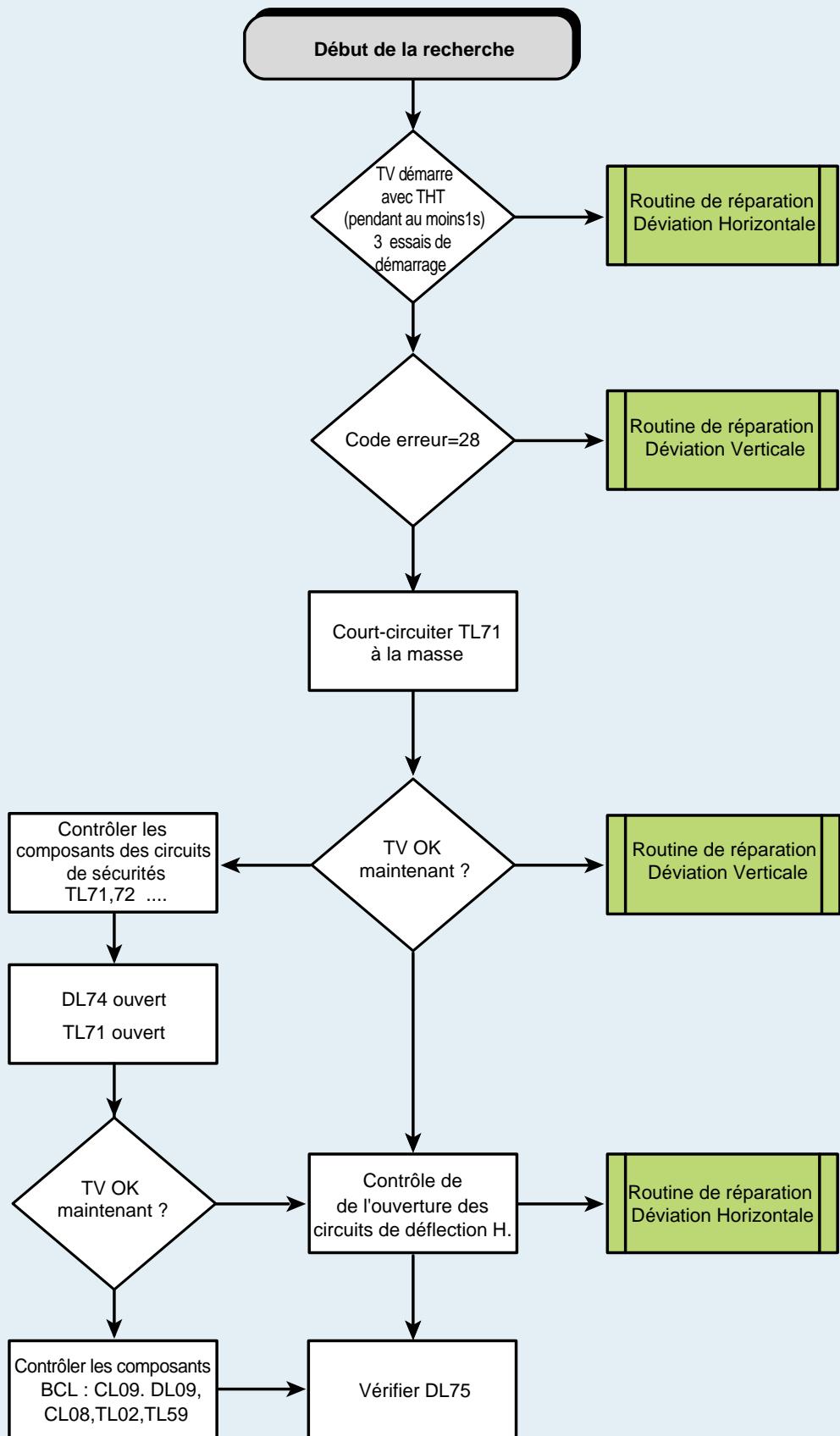
DEFLECTION CIRCUIT CHECK



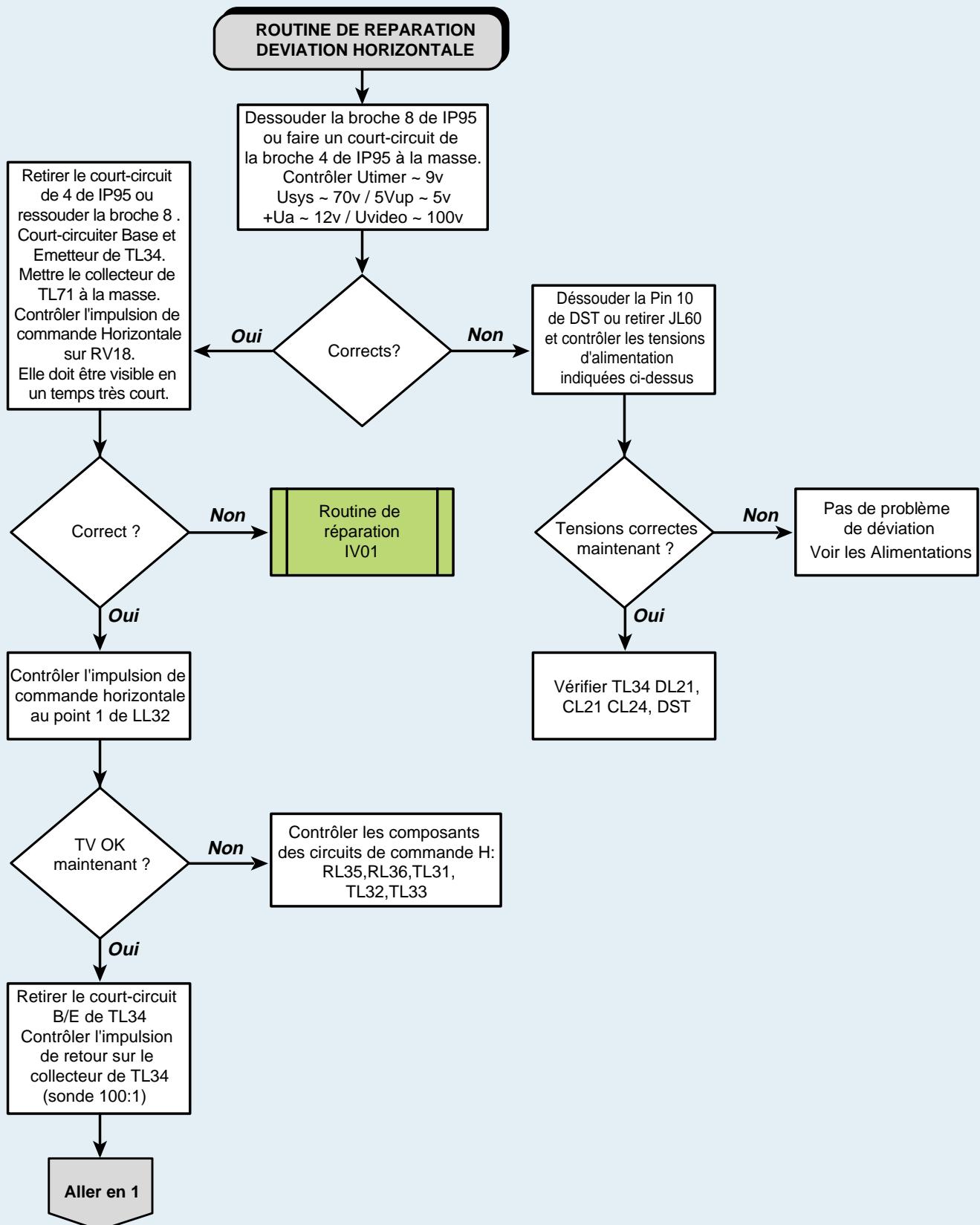
DEFLECTION CIRCUIT CHECK



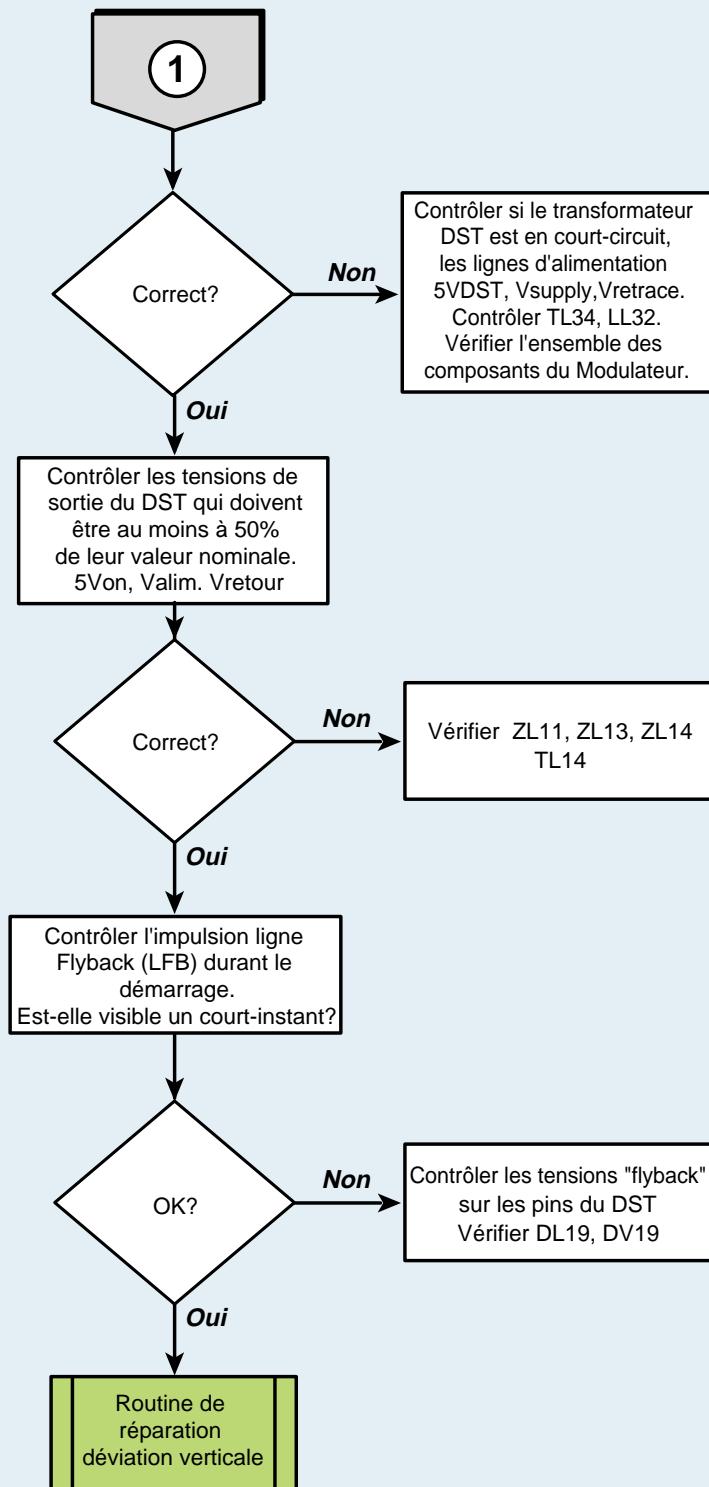
CONTROLES DES CIRCUITS DE DEVIATION



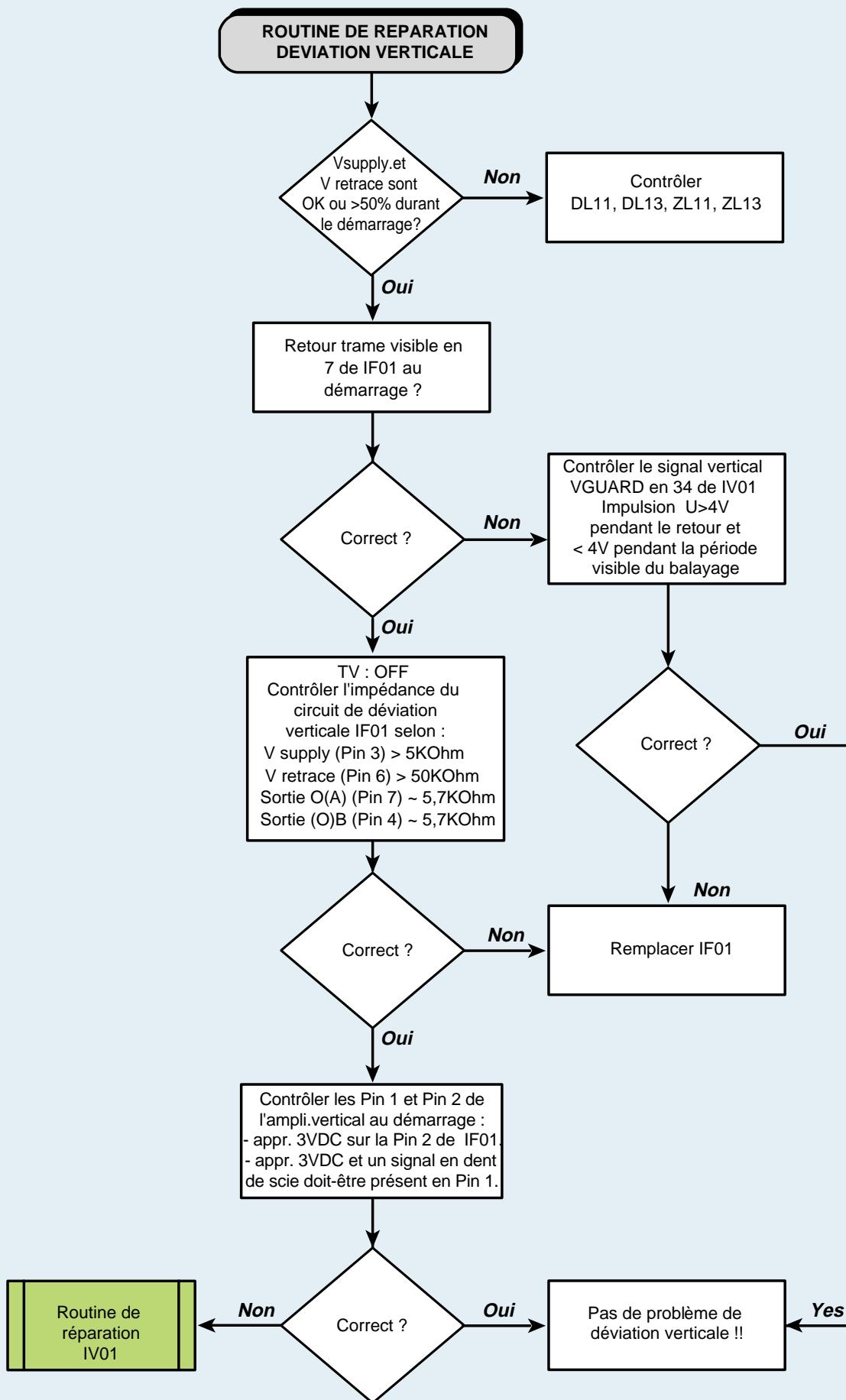
CONTROLES DES CIRCUITS DE DEVIATION



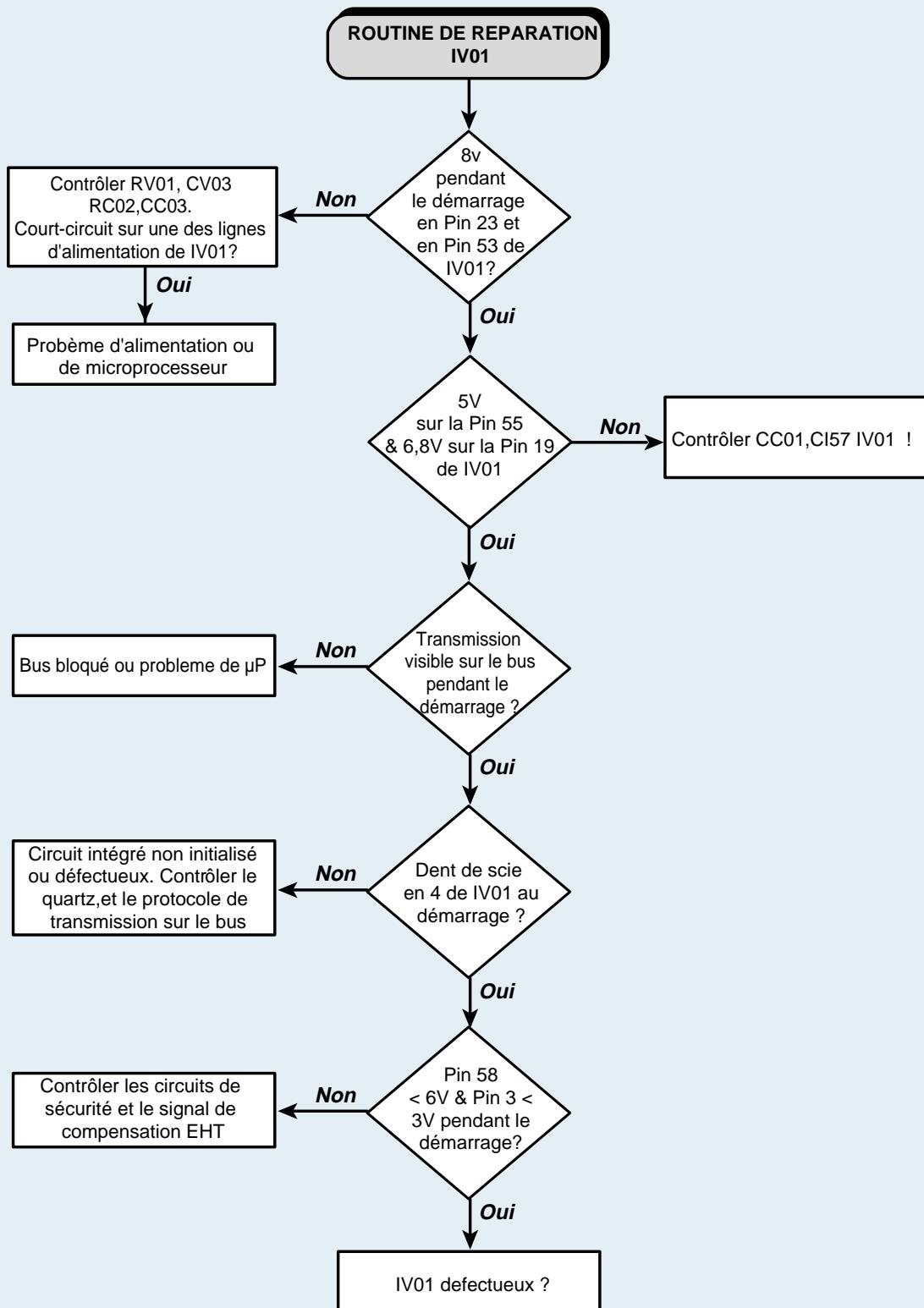
CONTROLES DES CIRCUITS DE DEVIATION



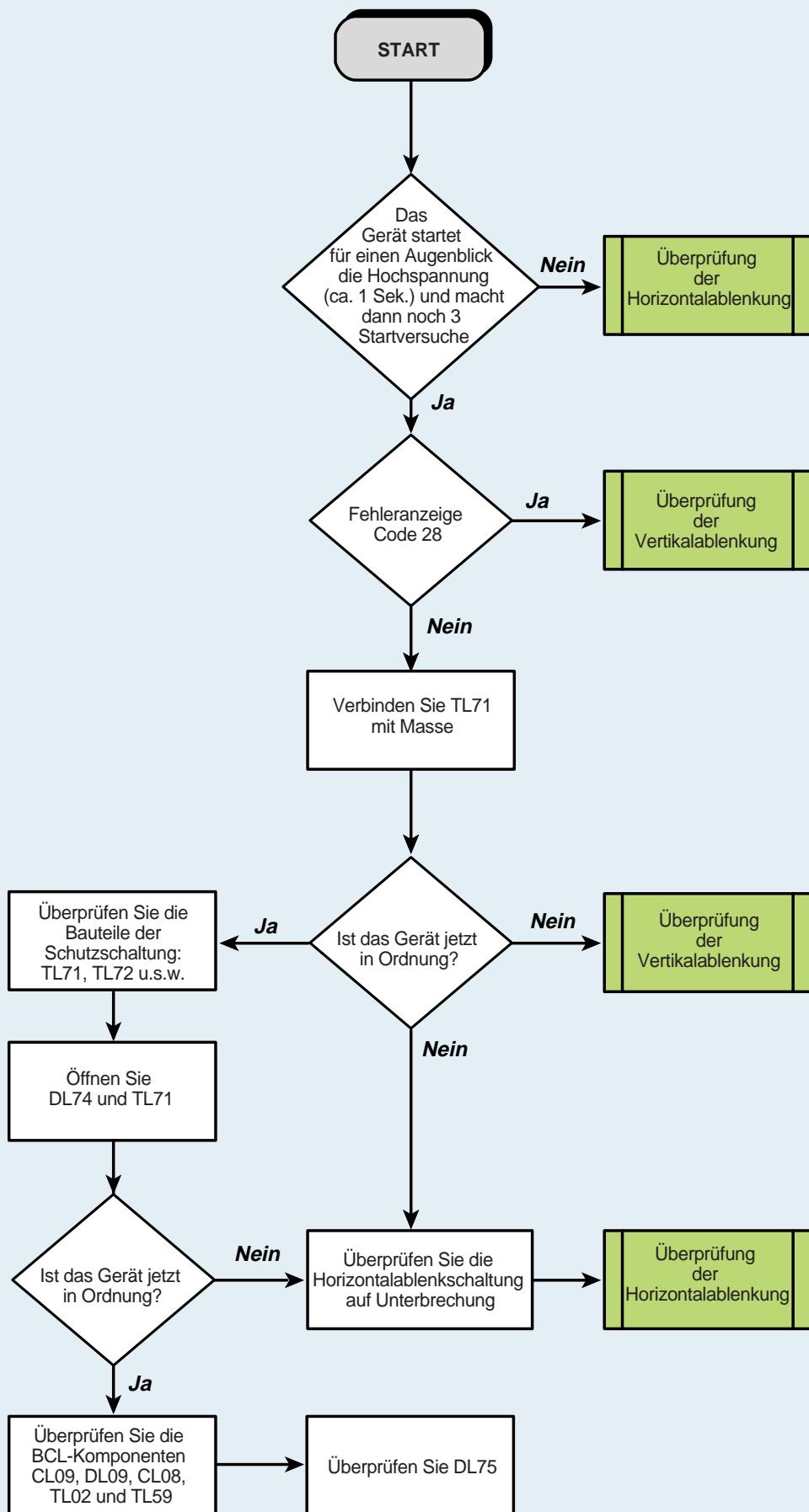
CONTROLES DES CIRCUITS DE DEVIATION



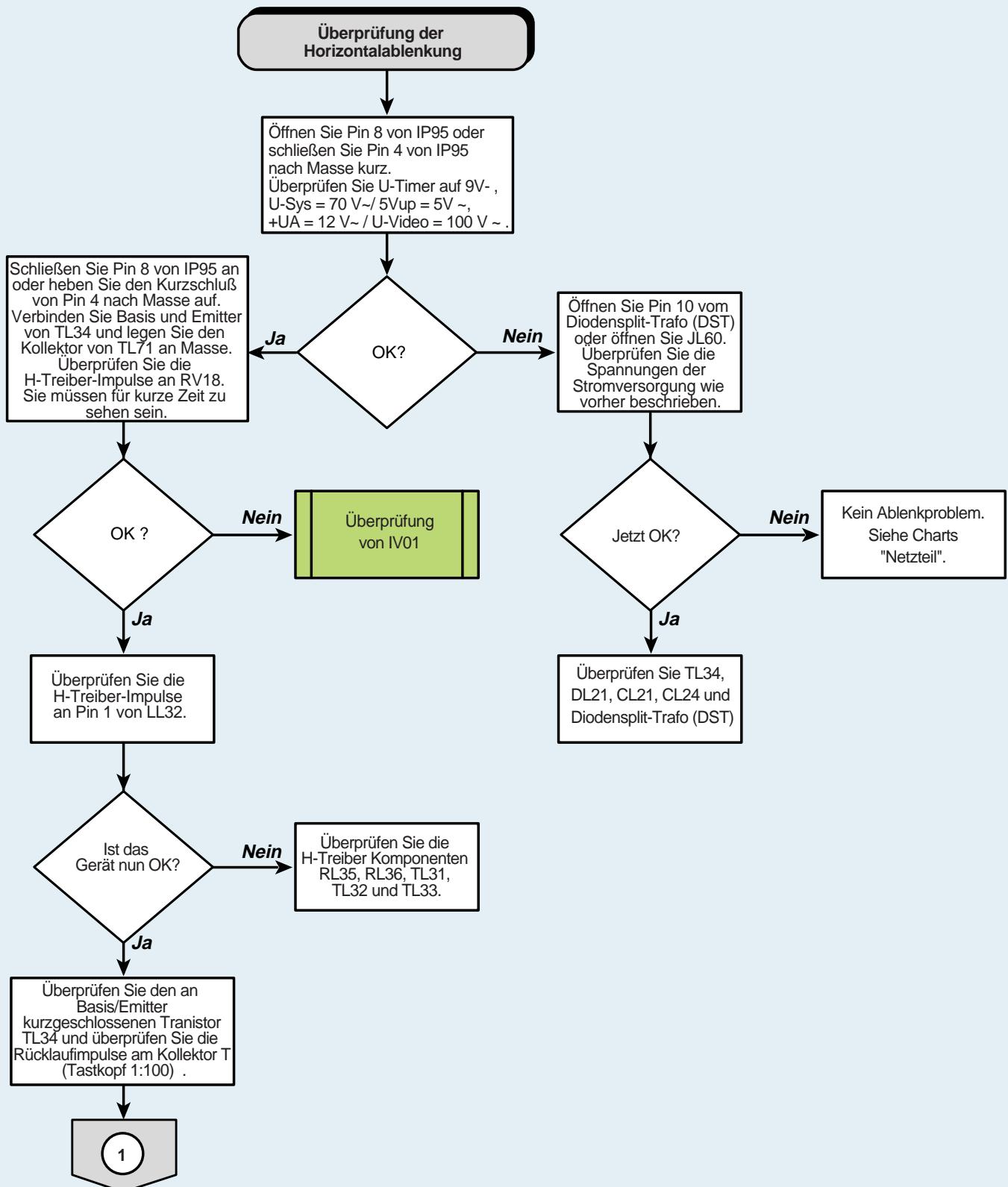
CONTROLES DES CIRCUITS DE DEVIATION



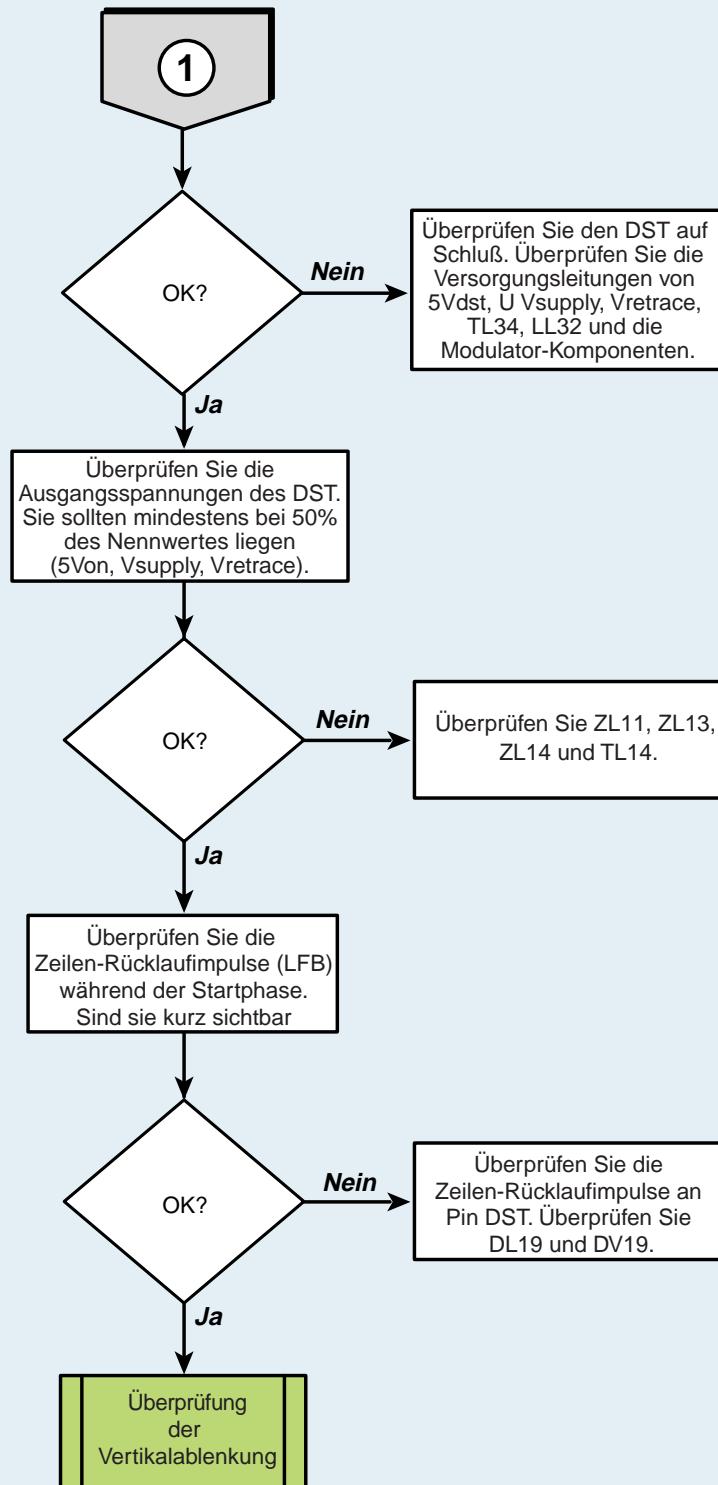
ÜBERPRÜFUNG DER ABLENKSCHALTUNG



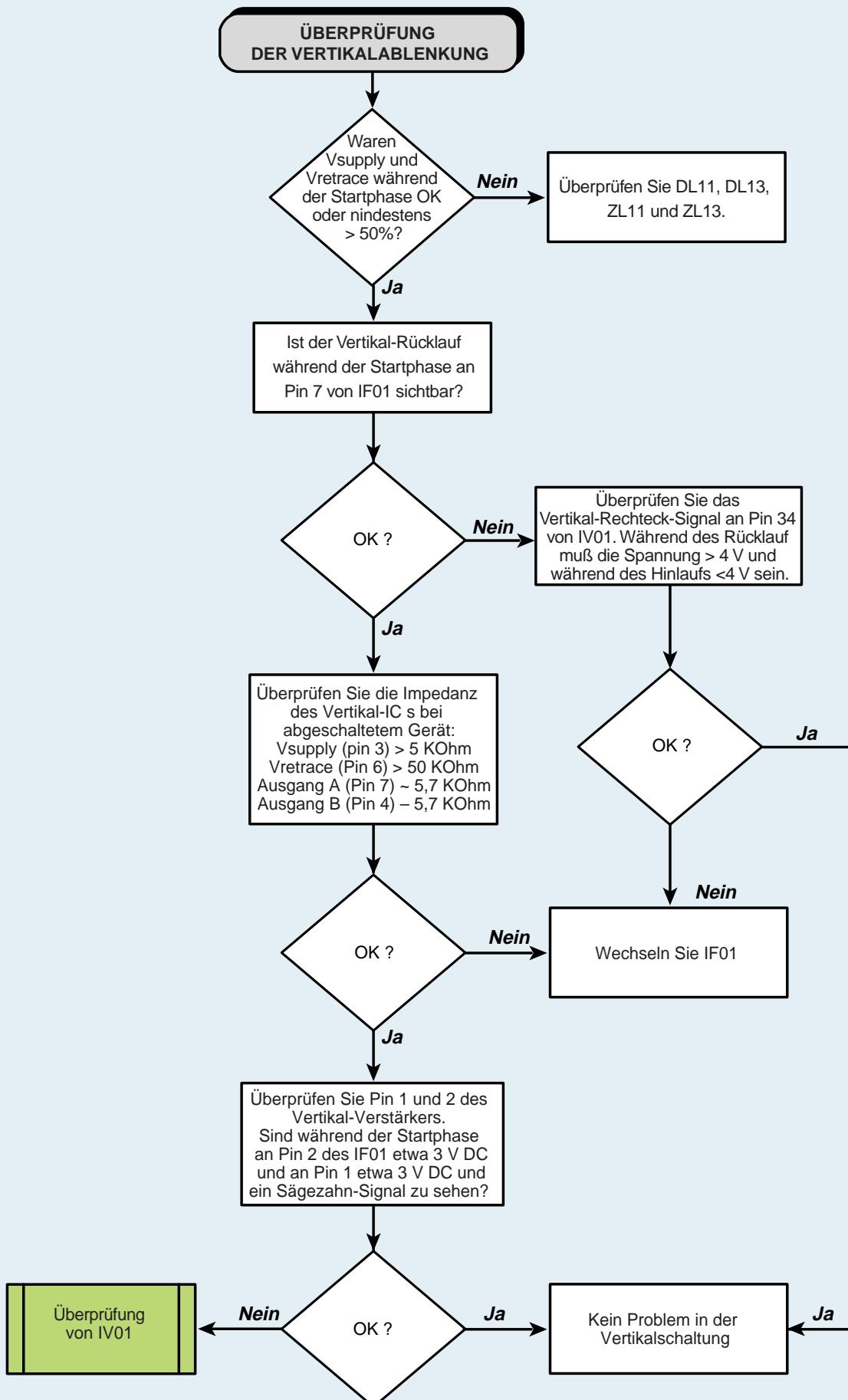
ÜBERPRÜFUNG DER ABLENKSCHALTUNG



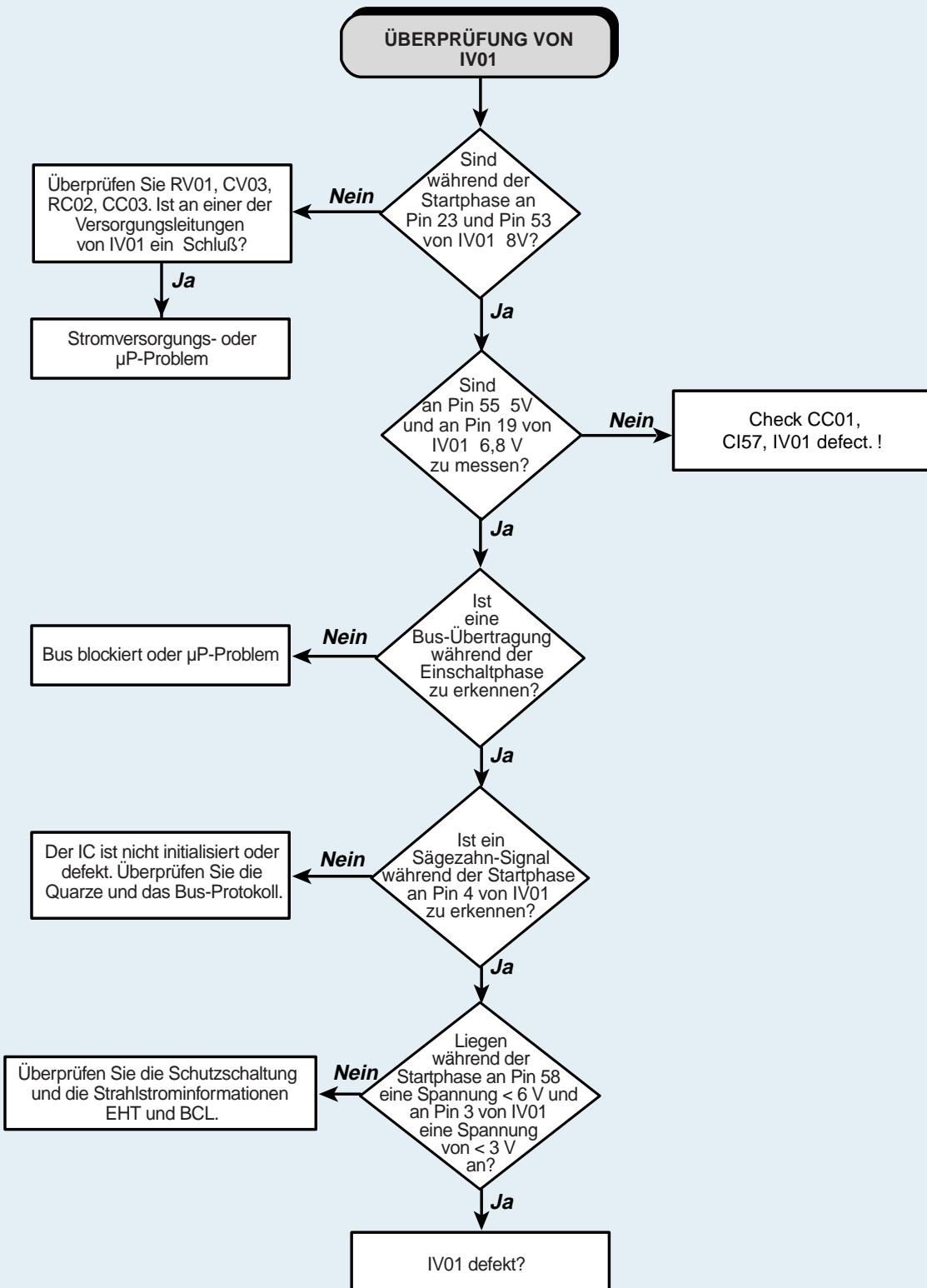
ÜBERPRÜFUNG DER ABLENSCHALTUNG



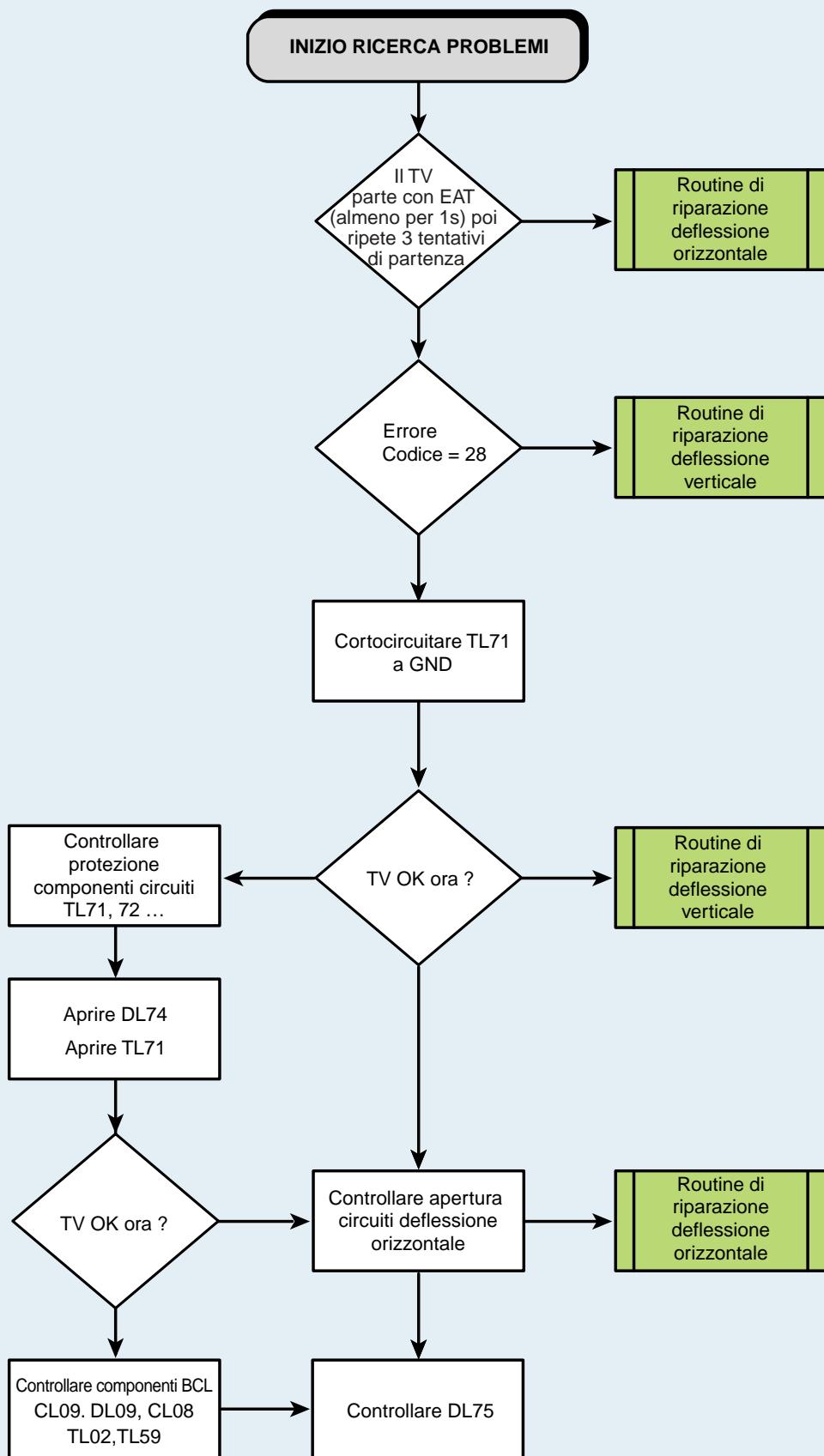
ÜBERPRÜFUNG DER ABLENSCHALTUNG



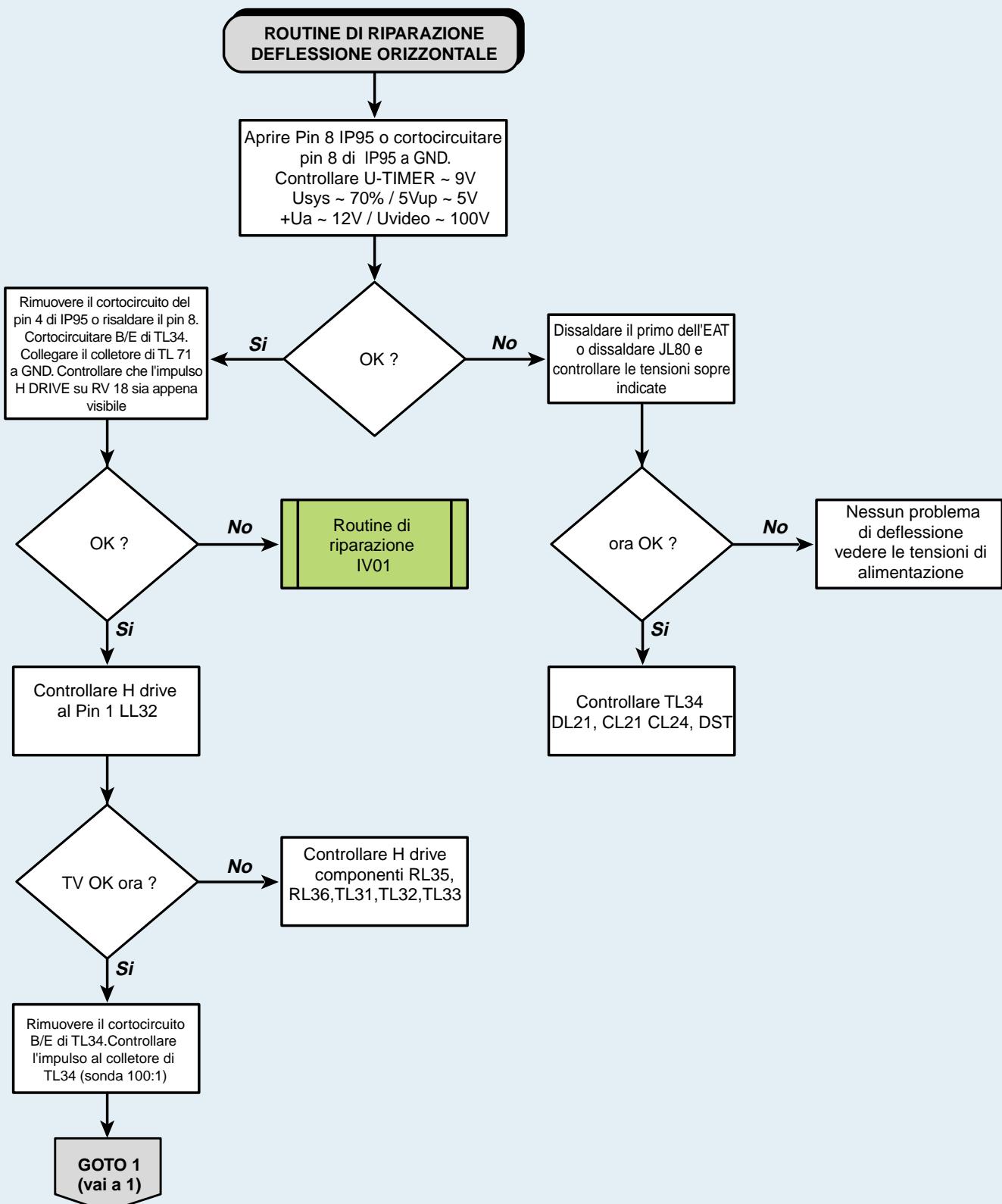
ÜBERPRÜFUNG DER ABLENKSCHALTUNG



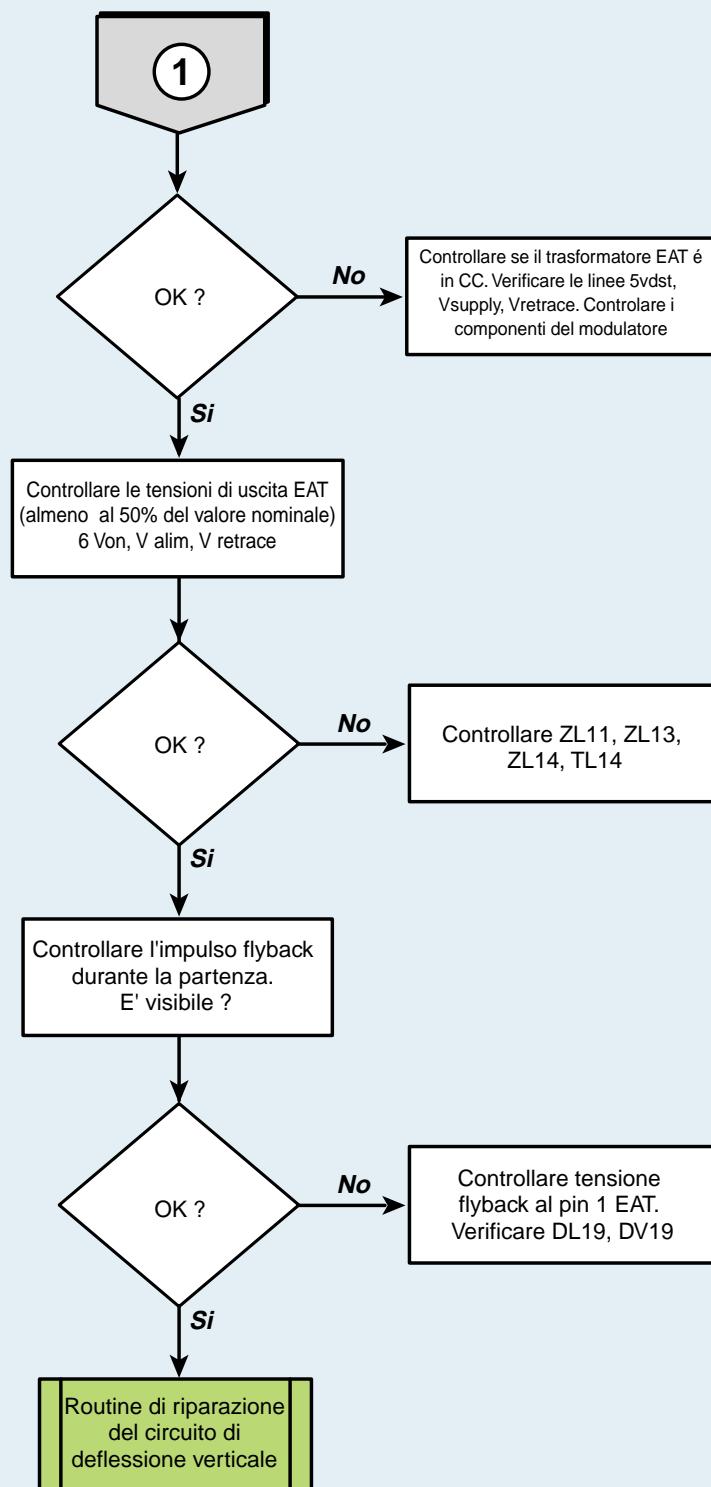
CONTROLLO DEI CIRCUITI DI DEFLESSIONE



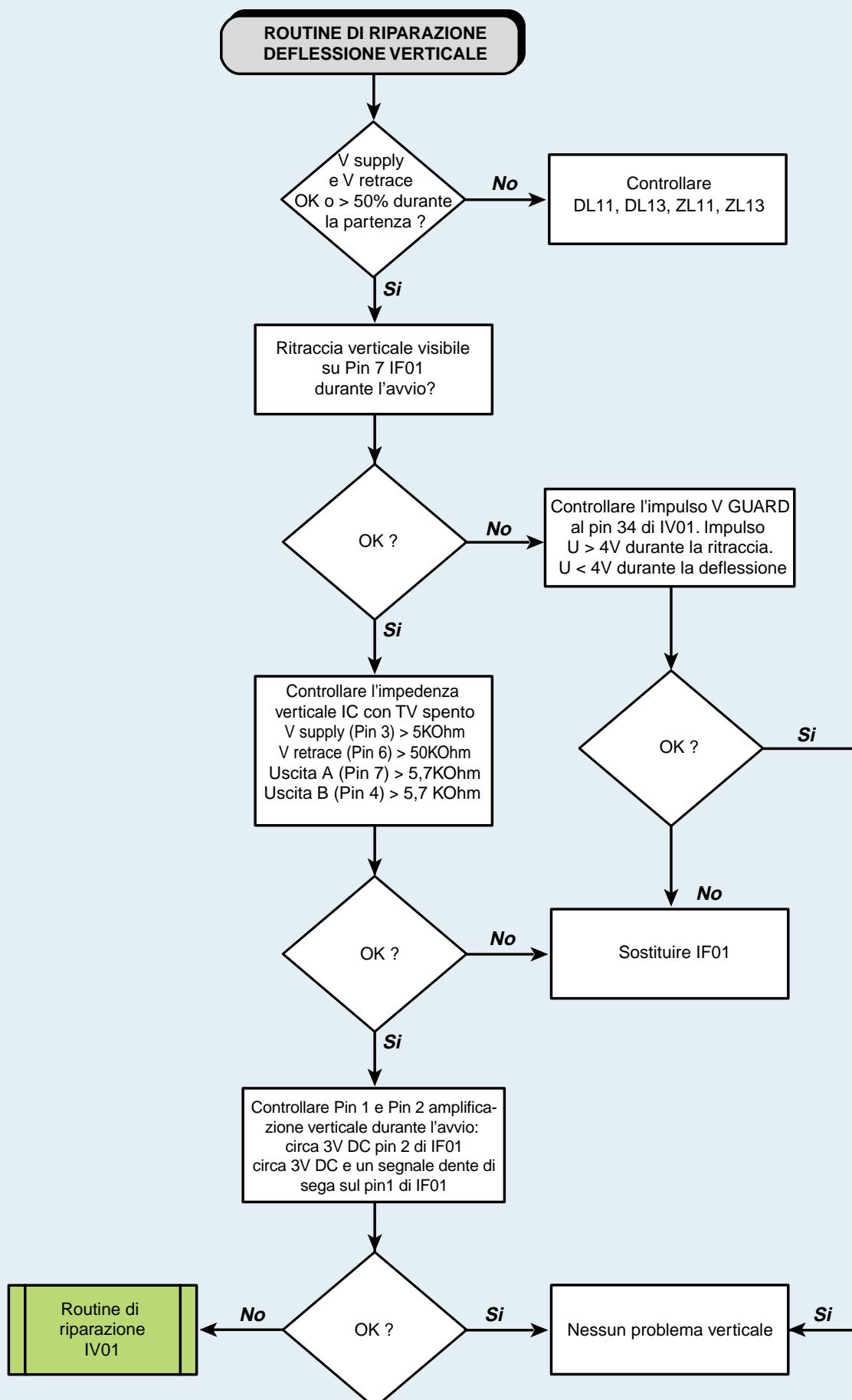
CONTROLLO DEI CIRCUITI DI DEFLESSIONE



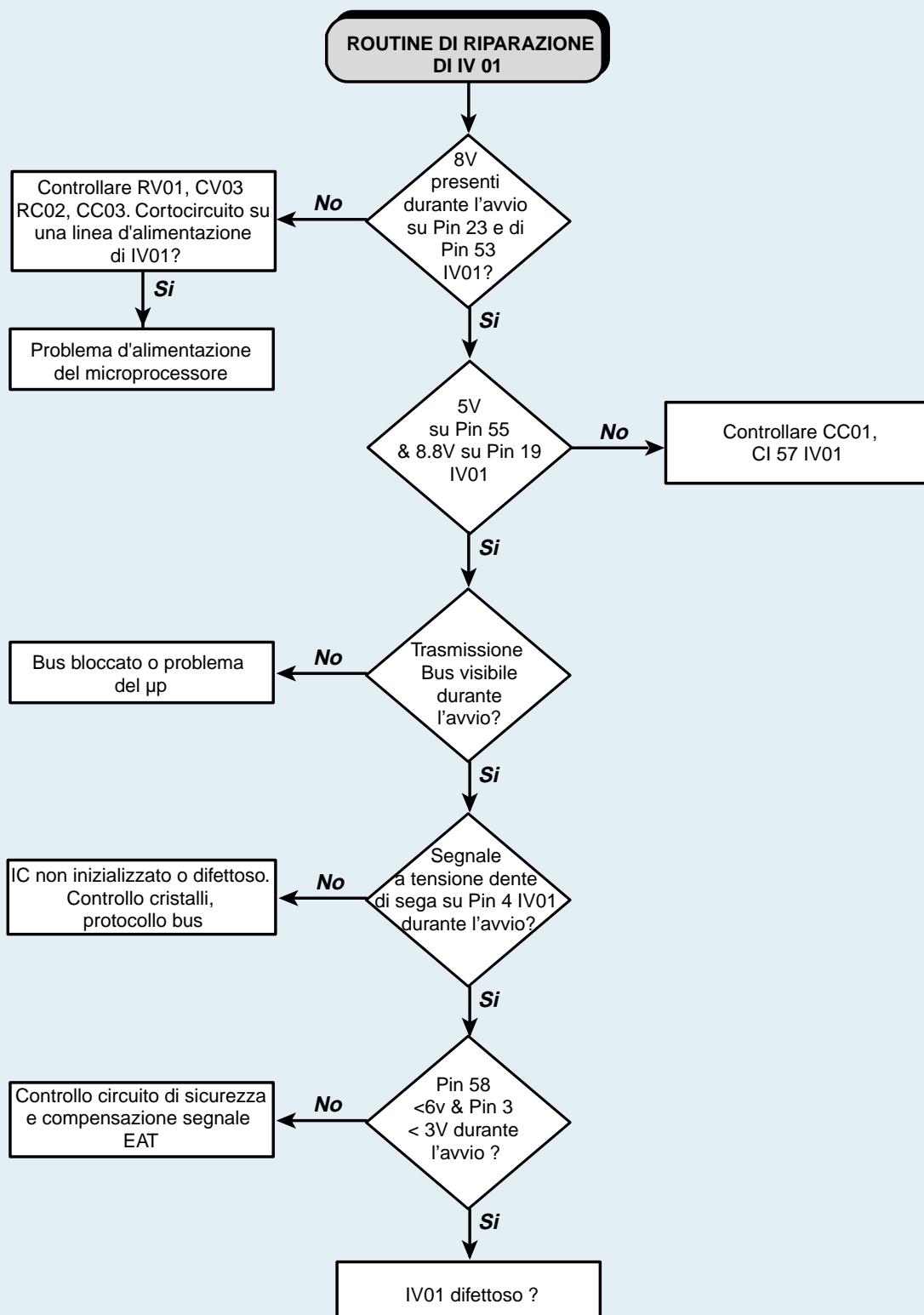
CONTROLLO DEI CIRCUITI DI DEFLESSIONE



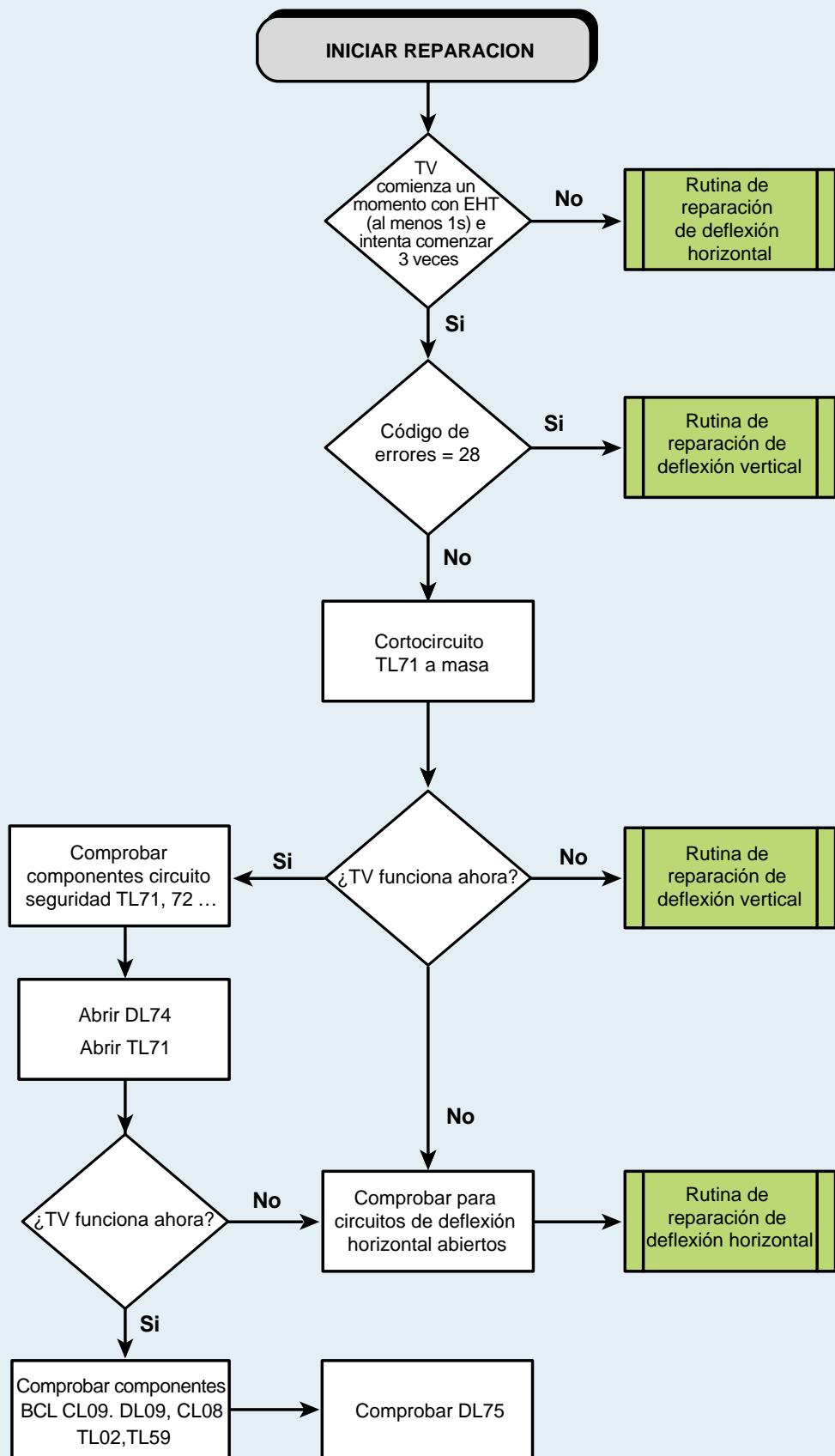
CONTROLLO DEI CIRCUITI DI DEFLESSIONE



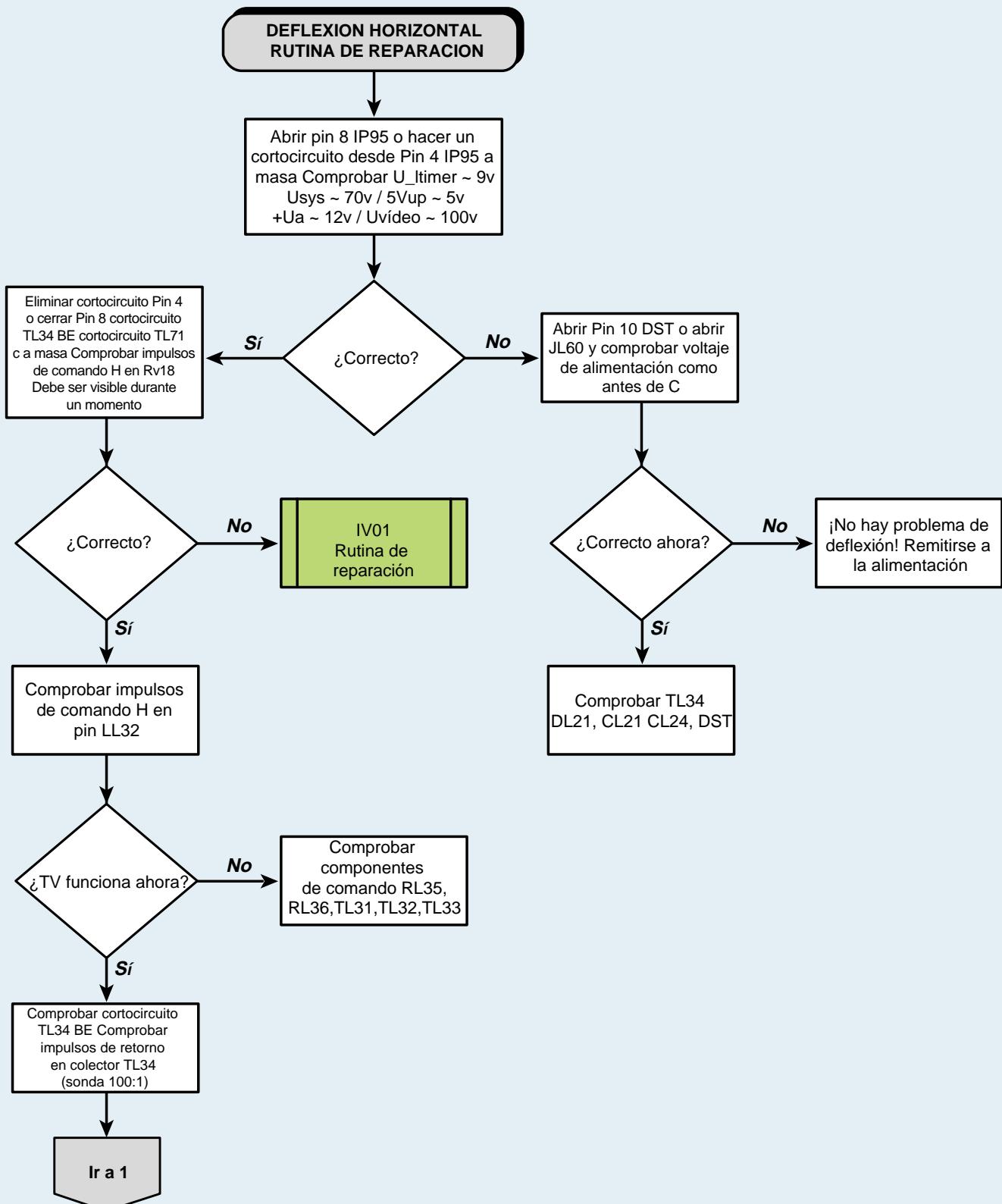
CONTROLLO DEI CIRCUITI DI DEFLESSIONE



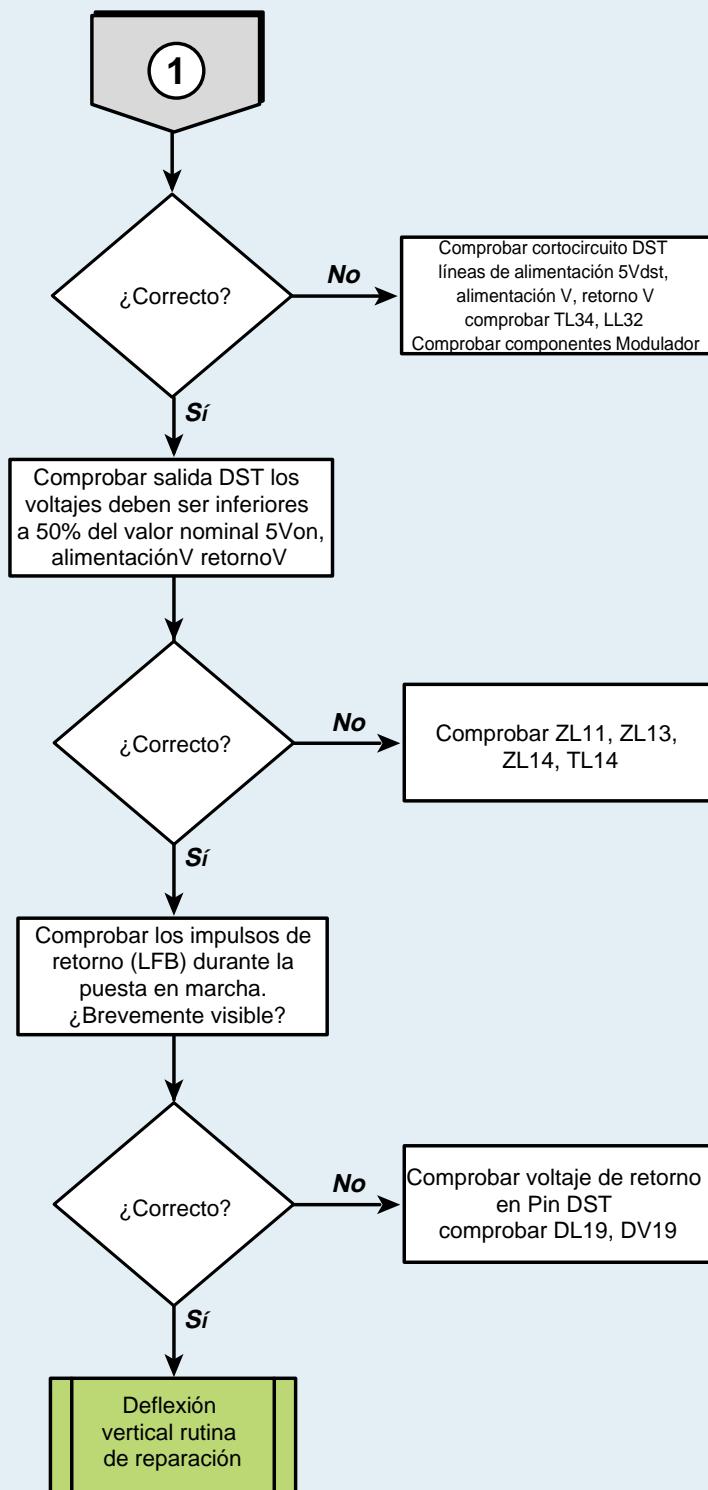
INSPECCION DEL CIRCUITO DE DEFLEXION



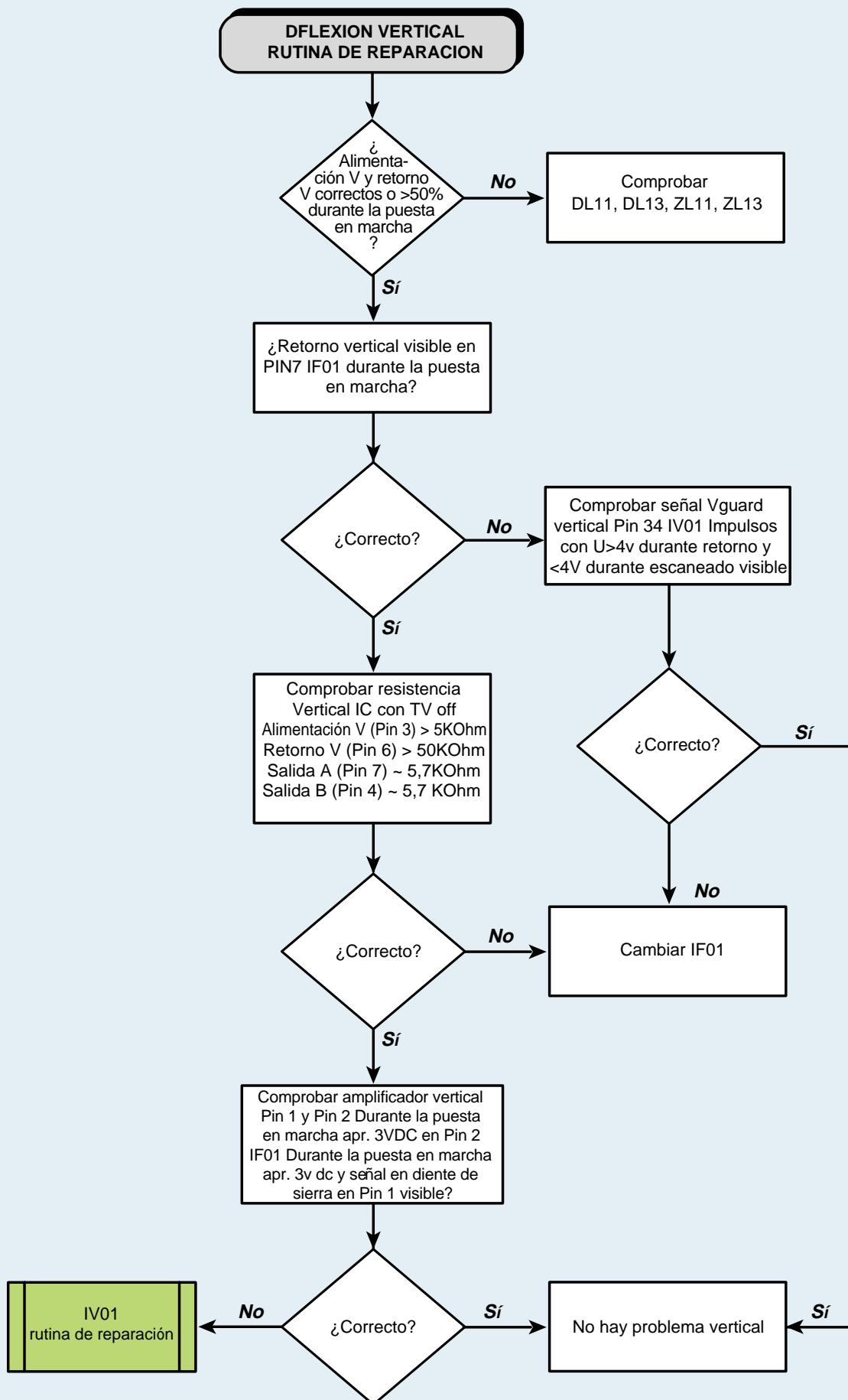
INSPECCION DEL CIRCUITO DE DEFLEXION



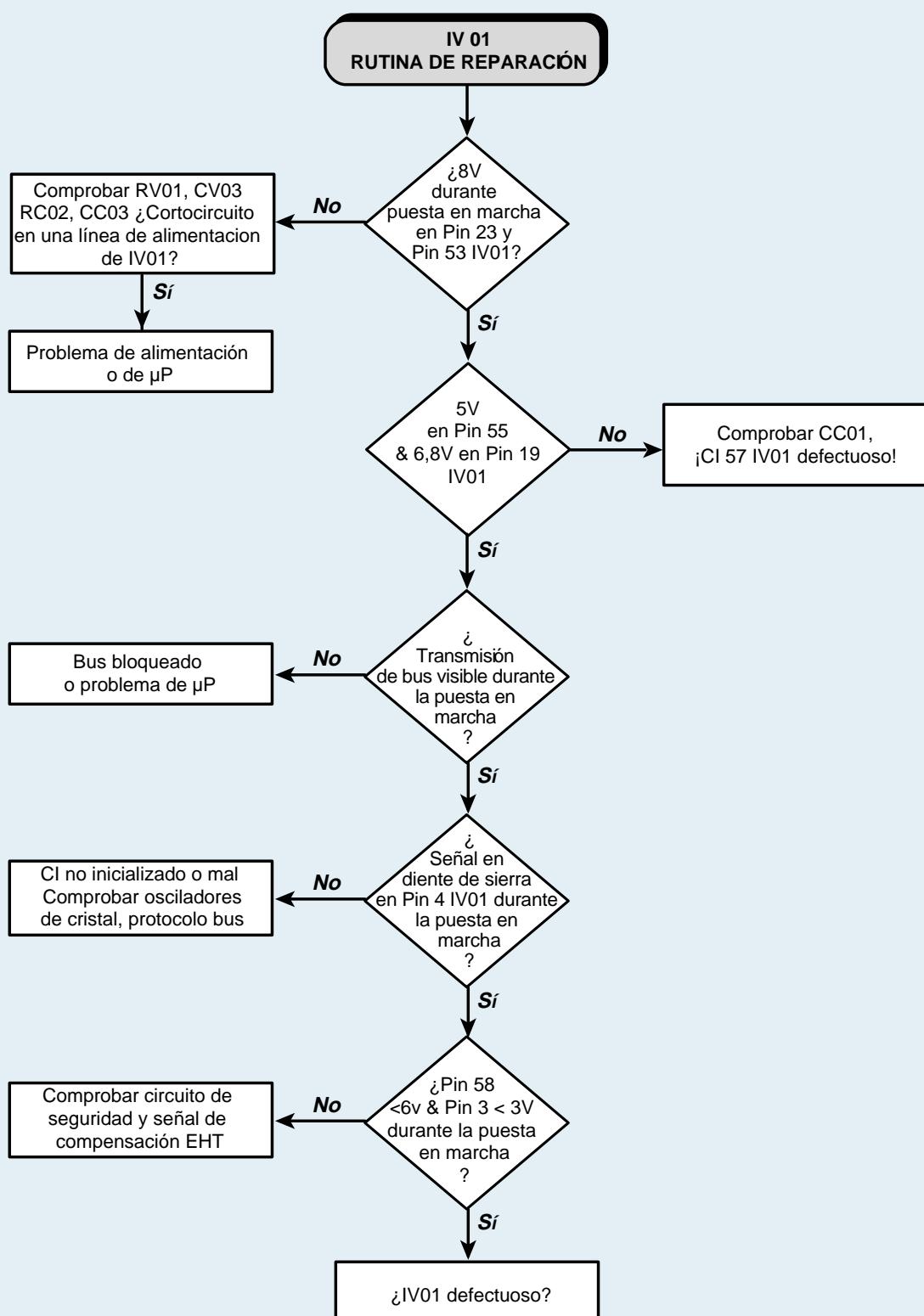
INSPECCION DEL CIRCUITO DE DEFLEXION



INSPECCION DEL CIRCUITO DE DEFLEXION



INSPECCION DEL CIRCUITO DE DEFLEXION

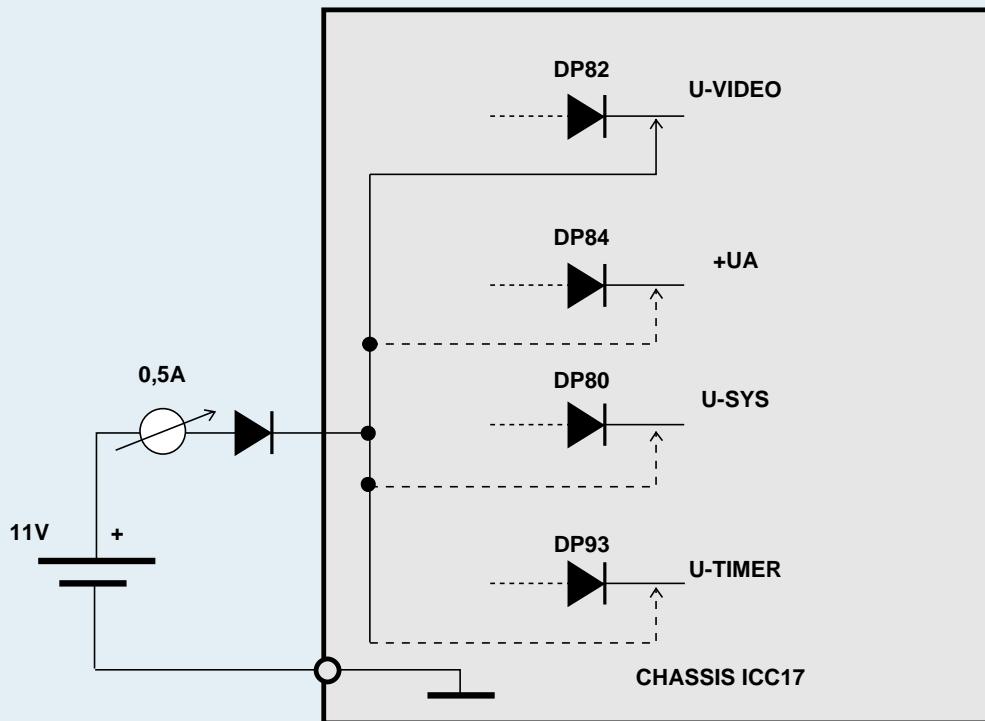


SECONDARY DC-VOLTAGES

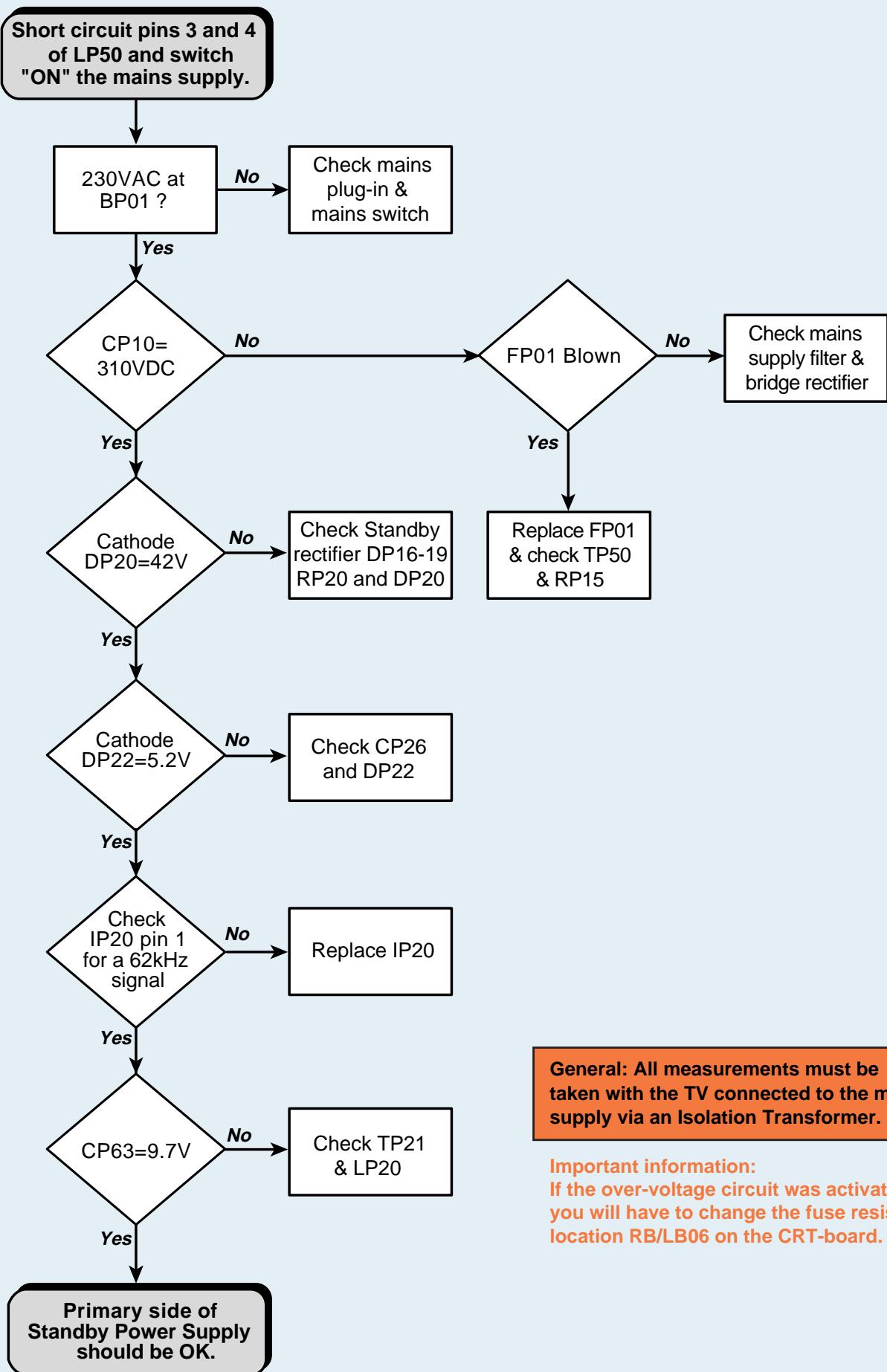
All measurements in this chapter must be done WITHOUT the mains supply connected to the TV.

Test circuit:

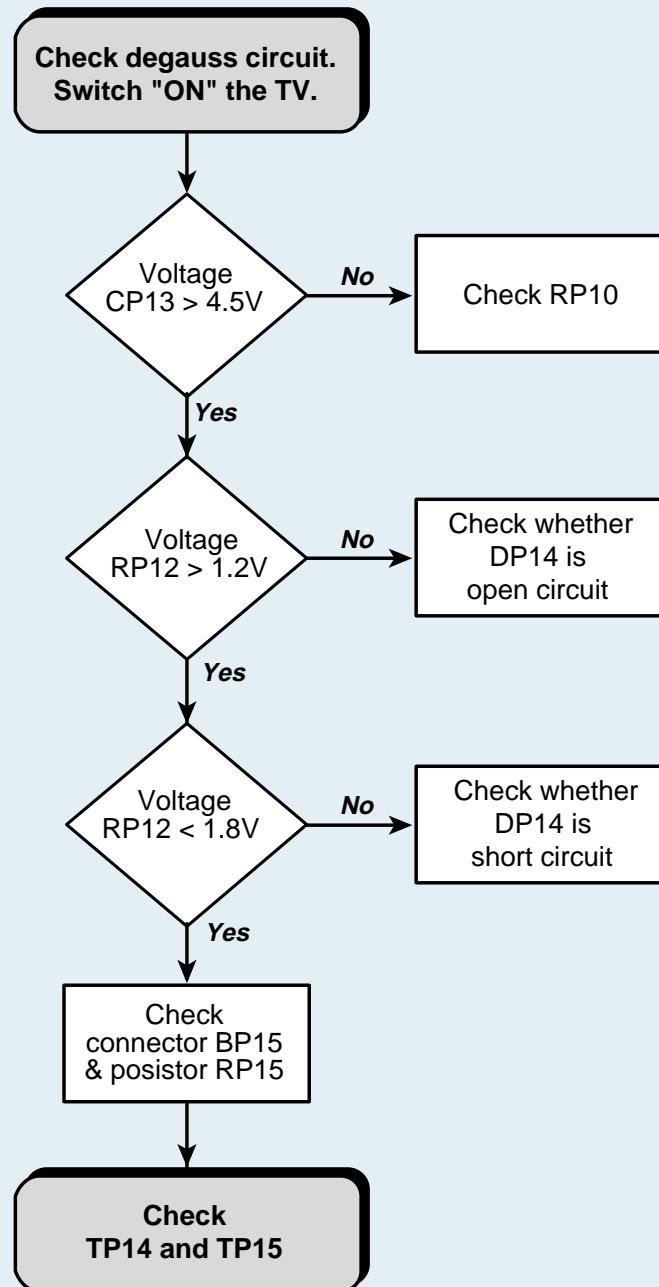
The external voltage source is provided by a variable DC-power supply with its output voltage set to 11V and the current limitation set to 500mA's. The negative terminal of the DC-power supply must be directly connected to the chassis secondary ground plane. The positive terminal of the DC-power supply is first connected to an ammeter and then the anode of an isolation diode. The cathode of the isolation diode is then connected to the load on the chassis as shown below. Measure the current drawn by each load tested.



STANDBY POWER SUPPLY - PRIMARY SIDE



DEGAUSSING CIRCUIT



TENSIONS SECONDAIRES

Toutes les mesures de ce chapitre doivent être effectuées SANS alimentation secteur.
Utiliser une Alimentation continue externe

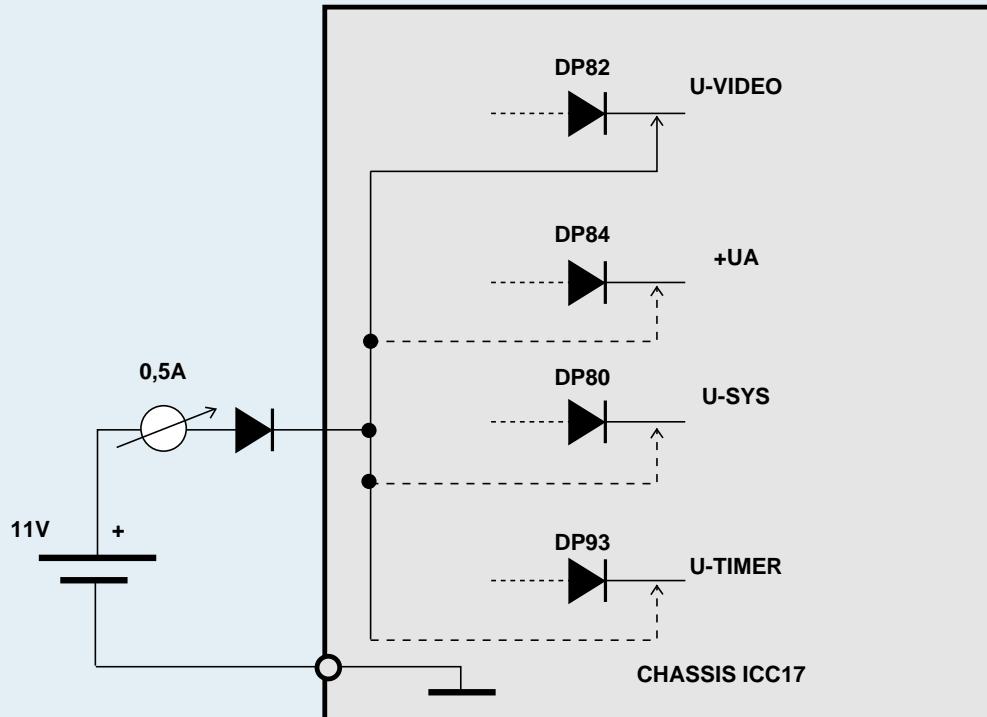
Circuit Test:

L'alimentation externe est une alimentation continue de 11V réglable avec un courant de limitation de 0.5A.

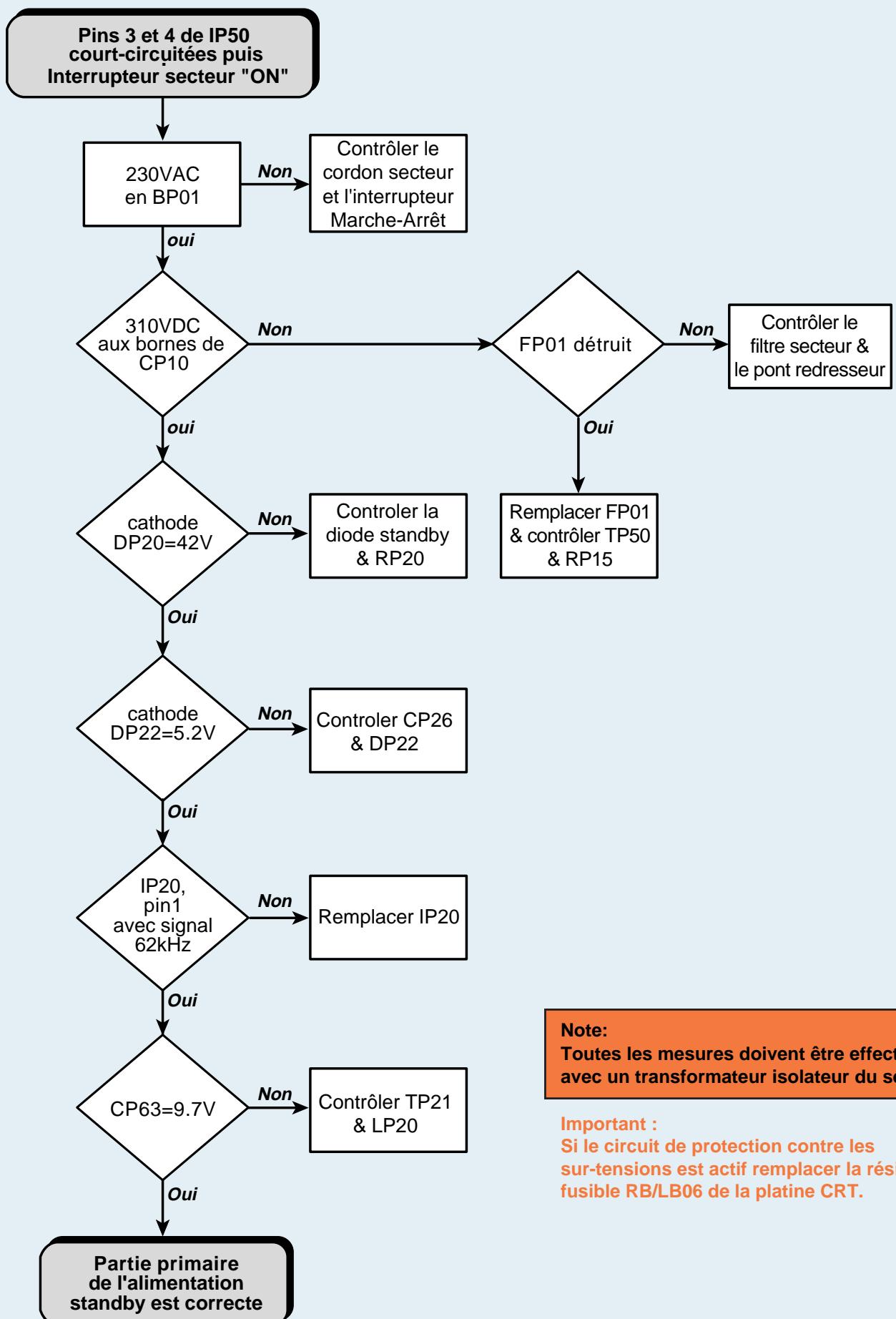
Le pôle - est relié à la masse secondaire du chassis.

Le pôle + de l'alimentation externe sera réunie à travers une diode, aux circuits de charge indiqués en début d'organigramme.(voir schéma ci-contre).

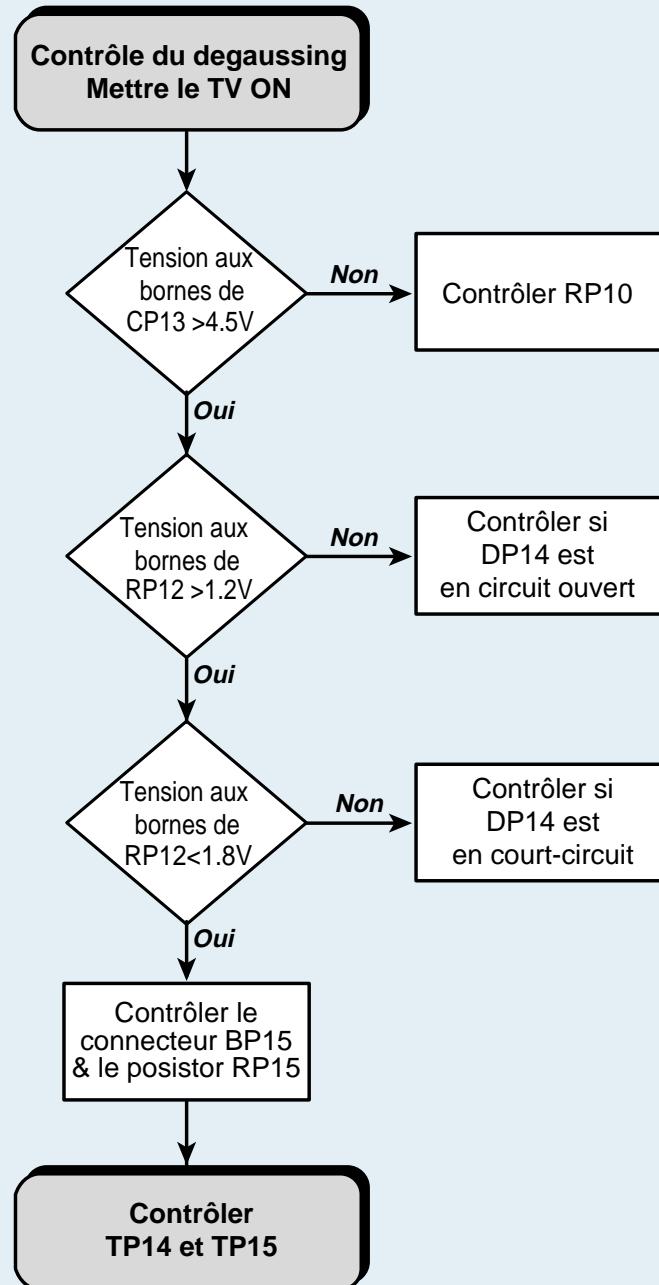
Le courant de charge devra être mesuré.



ALIMENTATION STANDBY - PARTIE PRIMAIRE



CIRCUITS DE DEGAUSSING



ÜBERPRÜFUNG DER SEKUNDÄRSEITIGEN GLEICHSPANNUNGEN

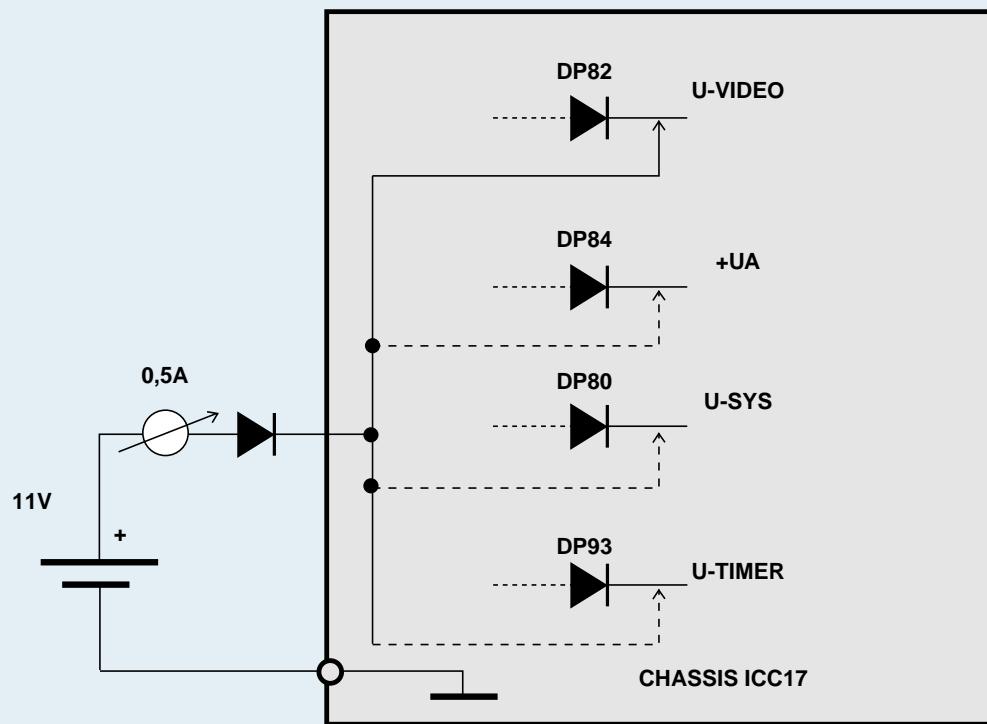
Alle Messungen in diesem Kapitel müssen ohne Netzspannung vorgenommen werden.
Benutzen Sie die Testschaltung.

Testschaltung:

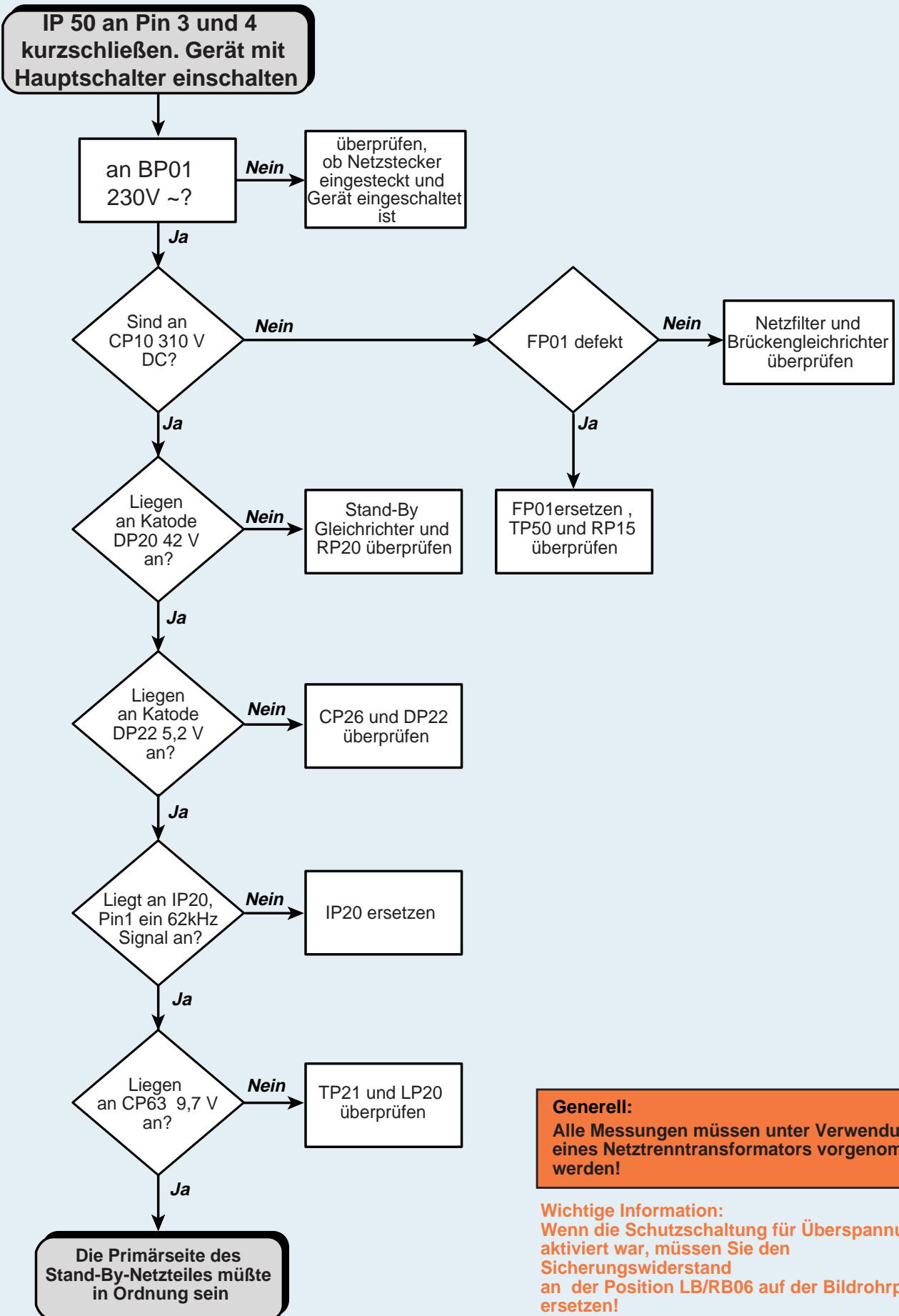
Die externe Spannung ist an ein externes Netzteil mit einer eingestellten Spannung von 11 V und einer Strombegrenzung von 0,5 A angeschlossen

Der Minuspol der externen Spannungsquelle wird direkt mit der Masse des sekundären Netzteils verbunden! Der Pluspol der externen Spannungsquelle wird über eine Diode eingespeist, wobei die Anode dieser Diode mit dem Pluspol verbunden ist. Die Kathode ist mit dem entsprechenden Einspeisepunkt auf dem Chassis verbunden..

Der Strom muß gemessen werden.



STAND-BY NETZTEIL - PRIMÄRSEITE



ENTMAGNETISIERUNGSSCHALTUNG

